PHOENIX RISING

Win!

OS 3.5

REVIEWED INSIDE

ON THE
CD

EXCLUSIVE
NIGHTLONG PREVIEW

SOFTCINEMA
POWERPC MOVIE PLAYER

PHOTOFOLIO
IMAGE CATALOGUING

DEMOS & MODS
IN ABUNDANCE!

PLUS

VIRTUAL
GRAND PRIX

OPINION
SPECIAL

9 771467 353015

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**AMIGA
COMPUTER SHOW COLOGNE**

November 12th-14th 1999

Exhibition grounds
Cologne, Germany

Regulars

But it *is* swirly, I tell you!

We're workin' hard, all Nightlong...

He's blue, da ba dee da ba dah...

Reviews

Can you tell what it is yet?

...these the ones you're looking for?

But that's *years* away, surely!

Features

Don't fly too close to the fire, now.

Warning: Don't eat shiny red plastic.

That's a grand hotel, alright.

AACD 2

This month's CD is packed with useful and entertaining material. Here are a few highlights, but half the fun is in exploring the CD yourself.

• An exclusive preview of Nightlong, prepared especially for *Amiga Active*.

• Sixteen high quality demos, read the feature and judge for yourself.

• If you like mods, this is the only CD for you. Each month we will bring you plenty of quality mods and this month is no exception.

• If you have an extensive image collection, have a look at the PhotoFolio image cataloguing system. It's ideal for anyone with a digital camera and hundreds of photos on their hard drive.

• SoftCinema is a new player for MOV, QT and AVI movies. Making full use of a PowerPC, it provides smooth video and sound playback.

...but that's really just scratching the surface. Double-click the "Welcome" icon and have a good browse around the CD for yourself, and don't forget - there's an easy-to-use search program if you're looking for something in particular.
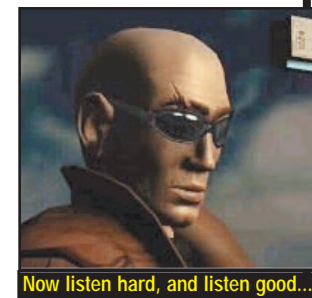
Now listen hard, and listen good...
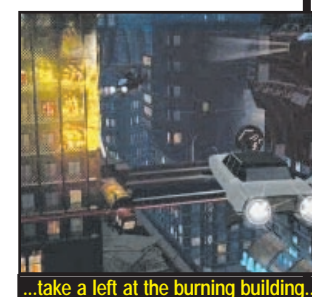
...take a left at the burning building.

...but don't stop to admire the view.

MCC Sinks...

Amiga have announced that they are scrapping plans for the MCC. In the wake of the departure of Jim Collas, the company has moved back to a software only model and will no longer be developing the much anticipated Multimedia Convergence Computer.

In a badly received "Executive Update" on the Amiga web site, new president Tom Schmidt confusingly stated that "...Amiga was never about a box. It was never about an operating system either." but failed to explain exactly what that left. Three days later, another update appeared, taking a far more conciliatory tone and holding out an offer of licensing deals to any company that might want to take up MCC product specification, although that seems an unlikely prospect at the moment.

Amiga now plan on producing software only. As the aim is for the Amiga environment to run under Java, it should run on any computer that has a Java virtual machine. However there will still be a Linux based OS, presumably so that Amiga can offer a complete OS and environment package to OEM manufacturers in the Digital convergence sector. Unfortunately, the main message of the current situation is that Amiga at least appear to no longer consider the current Amiga market to be of real concern to them. With the departure of Bill McEwen last month and Darreck Lisle this, there is no longer any interface between Amiga and the Amiga market.

It is generally assumed that the MCC was dropped for financial reasons. Amiga have not secured the funding model sought for by Jim Collas and are basically living out of Gateway's pockets. It would seem probable that they have decided they could not justify sparing the resources to produce a computer they never thought would sell in major quantities, keeping the money for paying the bills in a company that is hiring expensive developers. It is expected that more solid information will be presented by Amiga at the Comdex fall show, but it is not yet known whether the changes implemented under the new regime will affect this. German sales division Amiga International will be putting in their traditional appearance at the Cologne show at the time. Petro Tyschtschenko of Amiga International told **Amiga Active** magazine, "I'm still positive, I'm still continuing by business, and supporting the community."

Who's in?

Although the full membership list is at least 3 times as large, these names are those that were published in Phoenix's original announcement:

|			
Alan Crandall	JMS	Christian Kemp	ANN
Alan Swithenbank	Stanford Comp Systems Lab	Clash Bowley	Flying Mice
		Dan Dodge	QNX
Albert Bailey	Flying Mice	Daryl Low	QNX /Internship
Andy Finkel	Met@box	Dave Cook	Guru Meditation Error
Aron Digulla	AROS		
Bart G Colbert	BG Colbert	Dave Haynie	Met@box
Berardino Baratta	MetroWerks	Dinglis	QNX
Bill Bull	QNX	Don Cox	Don Cox Computer Productions
Bill McEwen	Amino		
Bohdan Lechnowsky	REBOL	Drew S Tarmey	IAT Manufacturing
Bruce Ellsworth	AmiTrace ACSVideo	Dr Greg Perry	GPSoftware
		Ed MacKenty	MacKenty Software Services
Carl Sassenrath	REBOL	Eric Herget	Ki Networks
		Fleecy Moss	Amino
		Fred Wright	The Wright Solution
		Gary Peake	Team AMIGA/OwlNet
		Geert Bevin	Thunderstorms
The Leaf		Michael Battilana	Cloanto
Giorgio Gomelsky	JMS	Mick Tinker	Access
Glenn Davidson	Cloud Media	Odd H Sandvick	
G'o'tz Ohnesorge	Greenboy	Olaf Barthel	logical line GmbH
	Phoenix	Paul Lesurf	Blittersoft
Hal Greenlee	HardDrivers	Paul May	Phoenix
Holger Kruse	Nordic Global	Paul Nolan	Paul Nolan Ltd
Igor Kovalenko	Motorola	Ray Akey	HMetalsoft/ZenMetal
	iDEN	RJ Mical	Mical.org
Joanne Dow	Wizardess Design	Robert Krten	PARSE/Cisco
Joe Gulizia	SCOLA	Ron Liechty	MetroWerks
Johan R¨nnblom		Rudi Chiarito	Magrathea Development
John Shepard			
Kevin Lowe	BrainDrops	Samuel A Falvo II	Dolphin
Kevin Tiernan	Elfnet	Shaun Sauve	QNX
Marc Albrecht	A.C.T.	Stephane Desrosiers	
Mario Charest	Zinformatic	Stephen Jones	Siamese Systems
Mario Saitti	Phoenix		
Marko Sepponen	Visual Engineer	Steve Tomkins	QNX
Martin McKenzie	CADTech	Tobias Abt	Picasso 96
Matt Sealey	U of Leicester	Vegard Berget	
		Wolf Dietrich	Phase 5

...Phoenix Flies

"...a new platform to take the Amiga community forwards."

A coalition of various Amiga developers with QNX Software Systems has been announced. In the wake of the announcement that the MCC had been dropped, many Amiga developers already alienated by the Linux decision started looking for an alternative, which the Phoenix Platform Consortium will be all too happy to provide.

The purpose behind Phoenix is to specify a new platform to take the Amiga community forwards. Many Amiga stalwarts such as Phase 5 and ACT involved, but this time so are a number of other significant names, including Carl Sassenrath and RJ Mical, two of the key developers of the original Amiga.

Phoenix has been offered QNX's almost completed Neutrino operating system as a starting point. The OS will run on Amigas with PPC accelerators as well as several other hardware platforms, notable possibilities being a native a PPC computer and x86.

The task Phoenix has set itself is to define a plan that gives developers something consistent to develop towards and will provide new Amiga systems for people to buy in the very near future. The organisers will be developing an efficient multi-tiered communication system with Phoenix at its heart. The Team Amiga web site is planned to serve as an interface between Phoenix and the general Amiga public. You can read more about Phoenix in this month's "Back for the Future" feature on **page 14**.
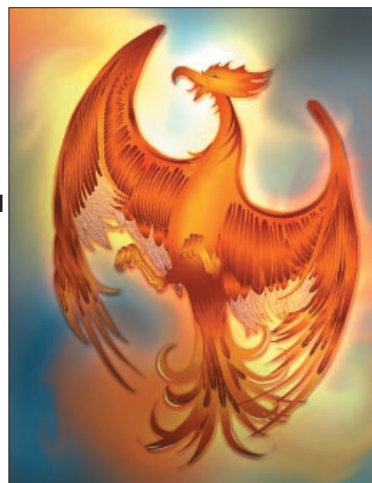
IBM goes POP

IBM have announced an initiative to promote PowerPC as a processor for Linux systems that should have a significant impact on the Amiga market. To enable companies to offer PPC motherboards, IBM have produced reference designs for a PPC motherboard and are making full schematics and even camera ready artwork for free to anyone interested in developing a PowerPC based computer and to assist OEM manufacturers in the design of their own PowerPC systems.

Named POP (PowerPC Open Platform), the reference design is an ATX form factor motherboard for G3 and G4 processors, a 100MHz processor bus, SDRAM memory in 4 DIMM slots, 3 PCI slots, 1 AGP port, Ultra DMA33 IDE and Ethernet. It is architecturally very similar to the abandoned CHRP (Common Hardware Reference Platform) design.

The board layout and artwork is being made available to potential OEMs this autumn. IBM will not be making the boards themselves, and haven't released any target prices. A number of companies have expressed an interest in the design.

X-Lights the Spot

X-Light is a new lighting control system for the Amiga. The interface software operates multi-channel lighting control hardware over the parallel port. The XL interface hardware converts level data sent over the parallel port to standard analogue 0-10v signals. The interface connects to controller cards in a modular fashion, allowing configurations to be built to suit the lighting rig. The modules come in the form of 12 channel 0-10v dimmer cards and 32 channel 0/10v switcher cards. The software supports up to 96 dimmer channels and 64 switcher channels.

The software is available as a free download. No manufacturer is currently lined up to produce the hardware, but the author will sell schematics and DIY instructions when the system is fully tested. For more information, check out the X-light website at: **http://www-users.rwth aachen.de/christian.entrup/index_xl.html**.

Goal! 2000
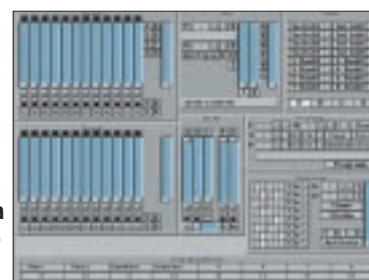
More Games from Alive

UK based Amiga games specialists Alive Mediasoft are launching a number of new games over the run-up to Christmas. Amongst the titles joining the long awaited launch of System 3's never platformer Putty Squad is Shadow of the Beast-alike platform game Cedric, a relaunch of Whale's Journey 2 and Goal! 2000. This latter title is an updated version of Kick-Off author Dino Dini's Goal!, and is described by Alive Mediasoft's Steven Flowers as, "the most playable football game ever."

Birthday Web Sites

Popular Amiga web sites AmiBench and Amiga Central have recently celebrated their second and first anniversaries, respectively. Both sites are marking the occasion with give-away prizes donated by various Amiga companies. AmiBench, for two years now the best way of buying or selling second hand Amiga gear, has a full commercial copy of Photogenics 4.2 to give away, the prize to be given to whoever answers some rather tricky Photogenics related questions most nearly accurately. AmiBench can be visited at: **http://www.amibench.org**

News and features site Amiga Central were given 10 copies of Foundation: Director's Cut and Starfighter by Epic Marketing, and 10 Amiga gift packages by Amiga International - they will be announcing results of the competition they ran shortly. For more information visit: **http://www.amigacentral.com/birthday.html**

French Renaissance

French Amiga magazine ANews has been re-launched almost a year after it closed. Francophone Amiga users have received a second boost with the launch of a new French language Amiga web site, **france.amiga.tm**. Run by the news editor at ANews, it features daily news updates.

The first issue of the new ANews hit French newsagents this September, within days of the launch of **Amiga Active**. In an odd mirror image of the AA situation, ANews originally closed the same month as CU Amiga magazine, but while many of the CU contributors moved on to work on AA, the revived ANews has a largely "noveau" team.

World Construction Set (again)

3D Nature have announced that World Construction Set 4.5 will be ported to the Amiga. The leading fractal landscape generator was originally developed on the Amiga, but has moved on to PC, Macintosh and Alpha platforms. Amiga development has never officially ceased, but promised releases have failed to appear - including a full release version of 2.04, sold as a pre-release. However 3D Nature have at last released a significant upgrade, allowing current registered users of 2.04 to download a new rendering engine from their web site.

The full version 2 that should have been provided as an upgrade to owners of pre-release 2.04 will now be replaced by v2.5, currently in development, which contains feature enhancements to v2 from other platform versions and some interface enhancements from version 3. WCS4.5, available now on Mac, PC and Alpha for $940, is promised as a future Amiga release, but no release date has been given. WCS4.5 includes animated textural displacement for water effects, Alpha channel support, weather effects and 3D object rendering supporting Lightwave, DXF and 3D Studio models. You can visit 3D nature's web site at:
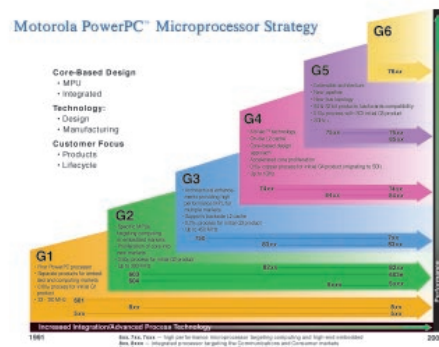**http://www.3dnature.com**
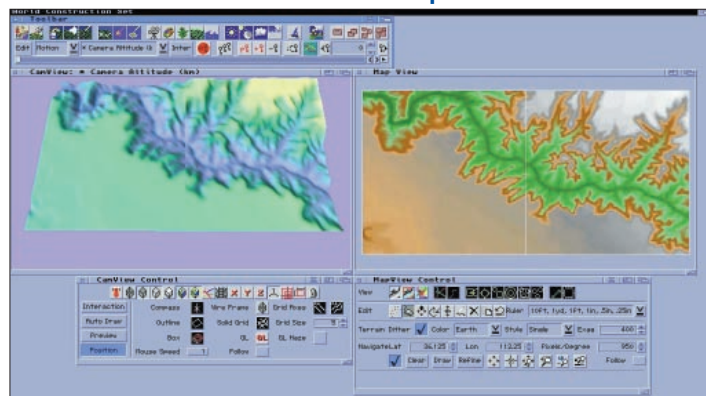
PowerPC Races On

PowerPC program partners IBM and Motorola have announced their plans for the future of the PowerPC line, with chips hitting 2GHz in the next generation. IBM outlined their Power4 'Gigaprocessor' technology, due in 2001. The 0.18 micron die processor will be launched at 1.1GHz, delivering a claimed 11,000 MIPS - well over 200 times the speed of an '060 processor, if you believe benchmarks.

The Power4 chip will use multiple "Ultra Symmetrical Multi-Processing" cores, offering significant improvements in memory system latencies. The technology promises to offer a 64-bit highly parallel architecture with full compatibility with the current 32-bit PowerPC instruction set.

Motorola's recently published roadmap for the future of the PowerPC microprocessor line shows the current chip technology, the G4 as used in upcoming Amiga accelerators from phase 5, moving from .15 micron copper technology to .13 micron copper / Silicon-on-Insulator (SOI) fabrication for speeds up to 1GHz. Their version of the Gigaprocessor architecture, the G5, is promised as backwardly compatible 64 and 32 bit processors on a .10 micron SOI process at 2Ghz+. A G6 is promised, but no details are given.

The announcement of backwardly compatible 64 bit systems is an interesting one in the light of the problems Intel are facing with their 64 bit, explicitly parallel IA-64 architecture. IA-64 is not compatible with current 32 bit Intel processors, and will present serious software legacy problems for Intel based platforms. It is also interesting to speculate just how fast 68k Amiga emulation would run on an 11,000 MIPS PowerPC processor.

Imagine all the people...

Development of the Amiga version of 3D renderer Imagine is still going strong and is now up to version 5.16 on the Amiga Constant Upgrade Program (ACUP).
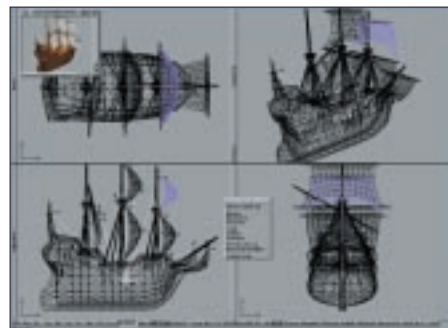
Gone is the orange GUI, replaced by a more Amiga-like front end. PowerPC support is also making its way in, with many modules being re-written to take advantage of the faster processors - the main rendering process will soon run natively on the PPC too. One of the latest additions to the program is an optimised PPC version of the MPEG video creator, giving an enormous speed boost to the creation of MPEG animations.

Developer Martin McKenzie of Cadtech explained the benefits of the Amiga Constant Upgrade Program:

"V5.0 was the last "full" release to be issued, but we are now on the Amiga Constant Upgrade Program (ACUP). The good thing about the ACUP is that subscribers get the opportunity to try out new things as and when they happen, rather than wait until the final V6 release is ready and issued."

Coming soon are such features as a new, completely rewritten preferences editor, and electronic manual to allow for searching and interactive tutorials. PPC-optimised math libraries are currently in beta-testing.

Some of the recent changes to Imagine include:

- MPEG support.
- PPC support.
- Updated GUI.
- Public screens.
- Multiple Arexx ports.
- Multiple simultaneous instances.
- '040/'060 optimized procedural textures, solid or shaded perspective view, and main executable.
- External picture & animation viewer support.
- New rendering presets.

For a fuller list of features, and to keep up to date with the latest news on Imagine's progress and development, visit the Cadtech web site, at:
http://www.cadtech.demon.co.uk

Psion Adventure

Psion has recently announced two new palmtop computers and launched another. The Series 5mx is a revision of the Series 5 with twice the CPU power and twice the RAM, available now at a street price of around £340. The low end Revo and the high end Series 7 are new designs. All use the same communications software as the Series 5, and should therefore work with Vapor's AmigaNCP filesystem software. Users have already reported positive results with the 5mx, and the upcoming models should also be compatible.

The Series 5mx is a development of the popular Series 5. It comes with 16MB as standard, and is powered by a 36MHz ARM71T CPU, the same processor as the Series 5 at twice the clock speed. It has the same 640x240 greyscale touch sensitive display and expanding pantograph keyboard, runs of two AA batteries and weighs a mere 354 grams with batteries. Mobile Internet access is supported through infrared connection to any GSM mobile phone that uses the DI127 IR adapter.

Revo is a new low end, low price (the exact figure has not been announced) unit. It has the same 36MHz ARM processor as the Series 5mx, with 8MB of RAM and a 480x160 pixel screen, smaller than the Series 5/5mx but with improved contrast. It sports IR mobile phone and modem connectivity, a 14 hour rechargeable internal battery, and a very compact form - it weighs a mere 200 grams and measures 157 x 79 x 17 mm, 6mm thinner and about 12mm shorter and narrower than the Series 5.

The Series 7 is a quite a big step up for the Psion range, with a larger (235 x 182 x 37 mm) size accommodating an almost laptop like feature set, presumably the reason why they chose to skip a series 6. Slightly larger than previous Psion models, the Series 7 has a 640x480 pixel, 7.7" touch sensitive colour display, 16MB RAM, mobile phone connectivity and a 133Mhz StrongARM SA1100 processor. The same fold -out pantograph keyboard arrangement that made the Series 5 so good will be employed, although the keyboard will be slightly larger. Battery life is quoted at 8 1/2 hours with a rechargeable Lithium-Ion battery pack. The Series 7 will use the same Epoc32 operating system as the Series5, 5mx and Revo, with an extended colour interface. Pricing has not yet been announced, but is expected to be under £700.

Psion are pushing their Wireless Information Device strategy for mobile Internet access with the announcement of Psion.net. In conjunction with ISP Lineone, they will be providing a free ISP service and 2 million pages of content in a low bandwidth format optimised for viewing on series 5 and Series 7 machines. Register online at:
http://www.psion.net
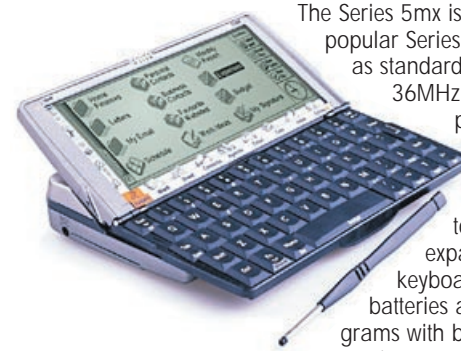
Editorial

Getting stuck in!!

All right, so you don't like the glue. We got the message, please stop sending in letters! I mean it's not as if we were offered easy to remove, pingy glue like CU Amiga used to have and turned it down, demanding the devil's own adhesive concoction instead. We just asked for glue instead of tape, and we only found out how sticky it was about the same time you did. Well, you'll all be glad to hear that we've talked to our glue people and, fingers crossed, it should be better this month. Actually, better make that toes crossed - I'm not going to risk crossing my fingers until I can get this damn glue off them...

Seriously, it amazed and gladdened us that the glue appeared to be by far the most important complaint for most people. There are, let's face it, many worse things that can go wrong with a magazine. Indeed, some of them did go wrong with *Amiga Active* issue one. The printing registration was not good enough; you can't expect perfection, but we expected better than that and hopefully should have that this issue. There were a few typos - I'm actually rather pleased on that count as we did better than normal, but being a bit of a perfectionist I'd have preferred none. There was the dodgy runaround on page ten that cut the last word of the pull quote, the missing bar at the top of page twenty four and a couple of pics on the Active Gamer page that got moved without the text being moved with them. Other errors I'll refrain from mentioning in the hope that no one will notice them. Of course I've noticed every single one and have a little scar on my soul for each... I want perfection dammit!

We are taking a bit of a gamble launching a new Amiga magazine, and to some extent, we are at the mercy of the market. All we can do is produce the best magazine possible and hope that enough people like what we've done and buy it. This means that we are listening very carefully to the feedback we get from you, our readers and in effect our employers, and are going to do our best to implement any improvements we can. You'll see some improvements already in place in this issue - we've revamped the Guru pages, rationalised the grid usage, tweaked the typography, improved the CD scripts for better compatibility, and generally jiggled, prodded and poked things into better shape. We won't be stopping there.

On **page 20** of this issue, you'll find a survey. We've kept it brief and to the point, so it won't take you long to fill it in (we'll happily take photocopies, of course). I hope you'll take this opportunity to tell us exactly what you feel about the magazine. We want your feedback so that we can make a better magazine for you, but of course this isn't entirely selfless. After all, a better magazine means more sales and more sales means we make more money and will keep producing the magazine rather than having to flee in penury and work tilling the soil in a kibbutz or sweeping the streets in Calcutta. Taking this into consideration, we're offering **five copies of OS 3.5** as a prize draw for those of you who send us those questionnaires. Of course, that doesn't mean we don't want to hear your opinions any other way - we love getting letters and e-mails from you, so keep them coming in - you'll find the address in the Interactive pages, starting on **page 54**.

Andrew Korn

QNX Partner up

QNX have recently announced two major partnerships. The first, with chipmaker National Semiconductor, will form a strategic alliance for co-developing production-ready reference platforms for the information appliance market. The companies' first joint release is the WebPAD, based on National's Geode GXm processor, which combines a Cyrix x86 core with graphics and sound hardware, memory interface and PCI interface on a single low cost chip.

The other partnership is with IBM, Embedded Plant and Motorola to jointly develop the MobileGT architecture for automotive driver information systems, basically an in-car information appliance. For further information on the announced partnerships, visit QNX Software Systems' web site at:

http://www.qnx.com

Amiga 0800

UK Amiga Internet provider Wirenet will soon be offering their customers limited free access to the Internet. Starting from November, subscribers on modem or ISDN lines will be given access to 0800 dial-in numbers all day Saturday and Sunday. Although there is still no sign of unmetered phone usage in the UK, through their host access provider U-Net, Wirenet are offering the freephone 0800 number over the weekend.

Such developments are a direct challenge to the free ISP model. Wirenet point out that if you spend on average two and a half hours per weekend on the Internet, a Wirenet subscription will not only get a better service that provided by a free ISP, it will actually work out cheaper than a free ISP. Further details can be found on Wirenet's web site at **http://www.wire.net.uk**, or by telephoning 01925 791716.

Elsewhere, Claranet are offering several fixed rate tariffs which include free calls - the top of the range offers 80 hours of cheap rate (or equivalent peak rate) calls for £29.99 a month. Unlike Wirenet's 0800 service, you are only eligible if you have a BT phone line. More info:

http://www.clara.co.uk

Real3D to return?

Realsoft 4D is the newest incarnation of the popular rendering software Real3D, which originated on the Amiga many years ago. Real3D has always been noted for its volume rendering features, which made it famously good at rendering glass objects - a strength the latest version certainly appears to share. Although Realsoft have not announced an Amiga version, they are reported to be looking for people to produce an Amiga PPC port.

The new rewritten version has an impressive feature set, including a NURBS modeller, metaballs, a particle system, a solid modeller, a 3D painting system, real-time rendering with 3D accelerator hardware, physics simulation, a platform independent plug-in API and a 64 bit rendering engine. It also supports, distributed rendering over a network, multi-threading and symmetrical multiprocessing. The images are sub-divided across networked workstations or processors for parallel rendering.

Distributed rendering could make major efficiency improvements in render farm situations and is likely to be a very popular feature for high-end / professional users. It is also a feature crying out for an operating system appropriate for it, and Neutrino is as appropriate as it gets. What's more they have already developed v4 for Linux and are working on a version for BeOS, another POSIX compatible Operating System - no wonder they seem to be interested in an Amiga version again.

Mad Cows at Gateway

It seems that Gateway's bovine herd has caught a dose of BSD - Bovine Spongiform Destructibility. Hundreds of thousands of spongy stress relief cow toys given out with Gateway PCs have been recalled due to fears that young children, many of whom are apparently keen to chew on the spongy ungulates, might choke on one. If you have one of these stress relief cows, Gateway are advising you dispose of it safely. Given the roller-coaster ride of the Amiga market during the past few years, it's a wonder no one has thought to release a Boingball spongy stress relief toy.

Rants and Raves

Nice hardware, shame about the Operating System. Hang on a minute, can't we do something about that?

Seen the new iMacII? 350MHz G3 CPU with a 100MHz system bus and a half meg of backside cache, 6GB hard drive, 64Mb RAM, Firewire, USB, 10/100 base-t Ethernet, 1024x768 screen resolution in 32bit at 75Hz on the built-in 15" monitor, 24 speed CD-ROM, good accelerated 3D graphics, built in v90 modem, wireless networking and Harmon Kardon's Odyssey audio system, all for £799 including VAT. Not bad, eh? Shame it's a Mac really. After all, it might not be up to MCC standards, but I'm sure most Amiga users would like to get their hands on hardware like that.

Strangely familiar
Of course anti Mac people will point out that the iMac is rather ugly and unexpandable. Anti Amiga people could say the same about the A1200 (although the ingenuity of Amiga hardware companies has proven them wrong). If you think about it, the target markets are very similar. Add inflation and a monitor to the price we used to pay for the A500 or A1200 and the iMac isn't that far away. Apple also have their A2000 / 3000 / 4000 equivalent, the drop-dead gorgeous G4 Powermacs. Speeds up to 500MHz and the enormously powerful Altivec extensions will make these things fly. There's a nice 1Mb backside cache, up to 1.5GB of RAM, resolutions up to 1600x1200 in 32 bit at 85Hz, 10 to 27GB hard drives as standard,

DVD-ROM, ZIPs, SCSI, USB, Firewire etc. This is some seriously powerful hardware, and prices that compare favourably to the A4000 when it was new. Ah, if only there was hardware like that for the Amiga now.

Shame it's all Macintosh...
Woah... back up a minute there. G3/G4, Firewire, USB, 3D - doesn't this all sound rather familiar? Isn't this basically what we're trying to shoehorn our Amigas into right now? Maybe it's about time we took that Mac hardware and left the Mac Operating System behind. QNX's Neutrino OS is nearing completion for PowerPC. We have various solutions for emulating 68k under PPC on the way. What more do we need other than a little bit of hardware driver work? If someone were to produce an "Amiga for Mac" system, it would open up a whole new world of hardware to us overnight. We could buy an iMac and install it ourselves, or Amiga companies could sell pre-installed Amiga systems based on Mac hardware. We could run current Amiga apps very nicely indeed under emulation, and future PPC apps at fantastic speeds. What's more, because Apple sell their computers with a ROM and OS, there would be nothing to stop these Amiga systems running Mac emulation!

Mac to Mac
Emulating a Mac on Mac hardware is not going to be a terribly difficult task. With a bit of work it could be done

transparently - if you try to run a Mac task under the native (Amiga) OS it would open an emulation window for that application but keep the emulated Mac desktop invisible. With a few other tricks such as supporting shared filesystems and clipboards, you could even run all that Mac software alongside your Amiga software, sharing jobs between the two, and appropriating a significant back catalogue of software.

The possibility of a system that is able to run a new version of Image FX at monster speeds, run PPaint and Fireworks 2 side by side and allow you to play either Explorer 2260 or Tomb Raider 4 would be an appealing system - and not only to current Amiga users. It would also appeal to many more who have moved on because they require specific software or more CPU grunt. Traditional Mac users might become interested in retaining their old software and working methods while gaining the benefits of Amiga software, a less clumsy OS interface and considerably improved stability. You might even find companies that use Macs moving over to reduce their system downtimes. Now I'm not suggesting that the Amiga become a hermit crab Operating System, crawling into the discarded shells of other computers. It would be a mistake

"We could be turning Macs into Amigas within a few months..."

to make the Amiga an add-on for the Mac as this would make us dependant on the decisions of a company with a shaky history and who would consider the development hostile. However, it looks like hardware very similar to that which Apple are currently offering will have a significant role to play in the future of the Amiga, so why not take advantage?

The first step of making the OS that will run on G4 cards work on Macs is not a huge task - several PPC microkernel Operating Systems have been ported - either wholly or in part - to iMac hardware as private projects. Of course, many people in the market today would prefer a G4 BoXeR or a phase 5 AmiRage with multiple G4s, but it's hard to turn down something that is cheap, widespread and in existence now. We could be turning Macs into Amigas within a few months.

Andrew Korn A

Pictures courtesy of Apple Computer, Inc.

Rants and Raves

The world's computing press all have something to say about the people, the position and the rumours surrounding Amiga. Engulfed in changes of management, direction decisions from its owners, phantom companies building clones and majorly reworked compatibles, the literary mills are hard at work to dig up anything and everything remotely connected to the Amiga, and it appears their readers are

approaches, isn't it about time to take advantage of the current coverage and use it to ride into a new era, to start the next trend?

The Amiga has always been about a freedom of choice rather than about a particular silicon set. If tying the Amiga to ancient hardware was the way to go, we could all still be using 1MB A500s, but the Amiga's sleek and modular OS design would make good use of popular, cheap, and

Freedom of choice

For all those that know, love, use and abuse one, the Amiga is much more than an eighties machine that pioneered a few classic games. For most, it has been. Yet today, some 14 years since its introduction, the Amiga is possibly receiving more media attention than it has ever done. Why?

> **"...the literary mills are hard at work to dig up anything and everything remotely connected to the Amiga..."**

sitting up and taking note. Considering the fact that there is no new Amiga hardware available yet, this level of market interest is quite some feat. So as the turning circle at the bottom of the computing cul-de-sac

plentiful modern computer components. With UAE, and Amiga Forever, coming on in leaps and bounds, what's to stop this being an Amiga system? Why should the Amiga OE be any different in concept? It does have

a distinct disadvantage of another underlying OS possibly slowing down a leaner system, but as a bridge to better things, this can't be so bad, surely?

In an ideal world we'd all love to see a modern Amiga OS running on some phenomenal hardware, bashing out games the like of which have never been seen before, but it is doubtful that this will truly ever happen given the minority market share the Amiga has left. Riding shotgun and coercing some leverage from established groups of users and software companies has to be the first wobbly step, and from there on we can start to walk. Let's just hope that running isn't considered a priority for a while.

Simon Archer *A*

All to play for?

Well, it's all going horribly wrong again isn't it? The MCC has been cancelled, staff are fleeing from Amiga like rats from a sinking ship and nobody seems to know what's going on. But what does this mean for us die-hard Amigans? To be honest, nothing really!

The MCC and the planned ATX motherboard were technically very different beasts to what we all understand an Amiga computer to be, and so the decision to abandon both these parts of the NG project does not represent a U-turn. Nor does it represent a betrayal of us by Amiga. The NG Amiga project was never a commitment exclusively to the Amiga community - it was a commitment to create a new computing platform under the

Amiga name to be pushed at anyone and everyone, regardless of their computing heritage. This has not changed.

Either way, all is not lost. Despite being cast out in the cold, QNX is pushing ahead with a version of its Neutrino OS, designed to run on classic Amigas with upcoming G4, G3 and 60x PPC accelerators. This makes a lot of sense. PPC cards are practically an entire motherboard anyway; they just lack a few I/O ports that our Amiga motherboards are enslaved to provide, so you may as well make an OS fit the card rather than the card fit an OS.

If all goes well, the Neutrino OS will run our existing AmigaOS applications under emulation - much like MacOS does with 68K Mac applications - whilst still offering us a fresh new OS environment and the prospect of new applications taking advantage of powerful PPC

> **"This is real - this is actually happening - this you can get excited about!"**

hardware. This is real - this is actually happening - this you can get excited about!

But if you still yearn for the promised NG Amiga gadgets in their funky cartoon cases and the prospect of AmigaObjects - there is still hope. As you read this, we are just a couple of weeks away from Comdex Fall, the biggest and most important computer show in the world-wide calendar. Under Jim Collas, Amiga always planned to be there - and nothing has been said following his departure to imply this has

changed, so far. Suffice to say that before I begin slashing my wrists in despair, I'd like to see what Comdex has to offer us - be it from Amiga or from the array of technology partners involved in its plans for the future.

Chris Green *A*
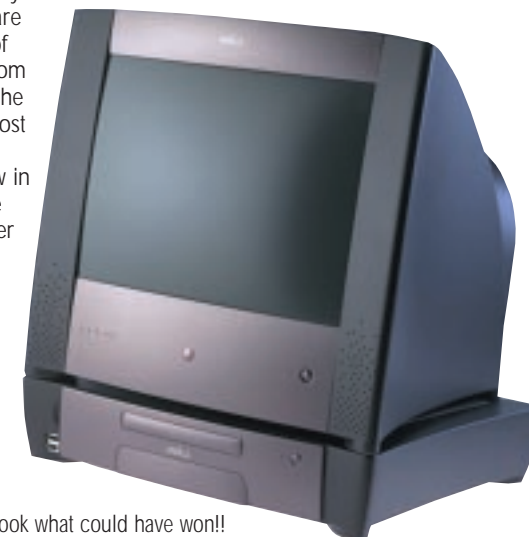
Right:...and look what could have won!!

Better off Ignored?

So, Tom Schmidt has made the Great Refusal, so to speak. He doesn't want to build Amiga desktop systems. Cue disappointment.

Now comes the real kicker. The unfortunate truth of it all is that it would have been a far, far better thing for the Amiga market if this had happened in late March 1997, when Gateway acquired the Amiga. Or August 1997, when Gateway gathered some of the so-called great minds of the ICOA (remember them?) for a "summit." Or January 1998, when the infamous "Amiga Inc. will use PowerPC" announcement was made, and so on.

Really, the sooner the better. With every meaningless commitment (remember QNX?), every empty promise, and every

> **"All you get when you feed off hope is death by starvation."**

juvenile cloak-and-dagger innuendo, Amiga Inc. paralysed the entire market. We got lulled into a holding pattern. "Just wait!" came the assurances from sources close to Amiga Inc. "It's gonna be BIG!" they said. You could almost feel the pulses slowing all around you as people blithely hoped that everybody's management dream team of Schindler, Petro and Collas would turn things around and give us what we really wanted: a top-notch personal computer.

Don't be fooled by the "We got lemons, let's make lemonade" crowd. The still extremely vaporous "AmigaObjects" development system was not worth a two and a half-year wait, and more importantly, it wasn't what we were waiting for in the

first place. If someone had the courage to say "Smeg off, we're not going to give you what you really want" in the first place, things would have turned out quite differently.

That's not to say that the Amiga market would have grown by leaps and bounds in the absence of hope in Amiga Inc., but I do firmly believe that its decline would have been slowed. There's a very big difference between a market actively fighting for survival and self-sufficiency, and a group of people feeding off of a hope that's being doled out in very small doses. Fights for survival often bring clever innovation from surprising sources. All you get when you feed off hope is death by starvation.

Above: Jeff Schindler

The proof of the pudding is in the tasting. But even more importantly, be very wary of the cooks who spend more time talking about how good their pudding will be - they often don't have very good recipes to start with. If they had had the courage to admit that they neither knew nor cared how to make an Amiga pudding, we could be eating now.

Jason Compton *A*

Amiga is dead - long live the Amiga

Tom Schmidt's first Executive Update broke the news. After a two year battle, Gateway's "we don't want to build an Amiga" faction claimed victory. Was this bad news? Yes, because it took over two years for Gateway to come to and admit it. All through those two years, Amiga users were living in hope of a new Amiga from Gateway, and Amiga developers were living in fear of a new Amiga from Gateway.

Why fear? How much time and money would you be prepared to invest in developing new hardware for the current Amiga market if there was a chance of it being made obsolete a few months later by the new Amiga from Gateway? We can only speculate, but would projects like the Pre\Box have had more chance of seeing the light of day had the "promise" of a new machine from Gateway not been hanging over them like the Sword of Damocles? It doesn't matter whether third party hardware is

> **"A strong parent can help a child develop and grow, a weak parent can hinder that development."**

better or not, an official product is generally going to be the one that defines the market direction.

The Amiga was most successful when it had a strong parent. Like any child, there comes a time to make your own way. For the Amiga, that time was several years ago. A strong parent can help a child develop and grow; a weak parent can hinder that development. Like the bird pushed out of its nest and left to fly or die, I feel we would have been better off without Gateway's "support". All they gave us were

reasons to not fend for ourselves.

It's not too late. There are still companies prepared to develop for the Amiga market, to take us forward. But that market, this community if you prefer, is now required to be self-sufficient. There is no one to help, and no one to blame, it's up to us now.

Neil Bothwick *A*

Rants and Raves

> **"It doesn't matter whether third party hardware is better or not..."**

Back for the
Future

Part two:

Phoenix Rising

Phoenix image by Asha DeVelder

You might think the announcement that Amiga have dropped the MCC would reduce the possibilities for a next generation Amiga. In fact it has increased them.

So that's it, right? Amiga have dropped the MCC so it's time to give up? Far from it. The Amiga market today has more chance of a future than it has had in years. One thing that no-one can doubt Gateway managed to do for the Amiga was attract attention, and whether or not they are entirely keen on the result, it has certainly had a positive effect for the Amiga user.

Remember QNX? The ones that were "the perfect partner" for Amiga until their change of plans? Well, QNX haven't forgotten what Amiga told them about the Amiga market being a powerful stepping stone for a new Operating System. They are going ahead with their Amiga inspired operating system, offering a free port to Amiga PPC (it will be included with phase 5's G4 accelerators). QNX's domestic version of their Neutrino Operating System is nearly complete, and should be available to Amiga developers within a month or two.

QNX aren't the only people galvanised by Amiga's bombshell about the MCC. Ex Amiga employees Fleecy Moss and Bill McEwen have set up Amino, Phase 5 have announced a new PPC based computer, and claim that as they now have a native OS to run on it, they'll actually build it this time. Met@box, the German set-top box

"A month ago, it was all so simple..."

manufacturer who used to be called PIOS, are looking once more at their plans for next generation Amiga hardware (remember the PIOS1?). Other companies with fewer current links to the Amiga-such as REBOL technologies, owned by the author of the Amiga kernel- want in on the act."

Exciting as this all is, it's also very confusing. A month ago, it was all so simple. If you wanted to know what was happening, you just needed to see what a single company, Amiga, were up to. It seems, now you have to keep an eye on a dozen. How does someone planning to buy a next generation Amiga make any sense of it all? More importantly, how do developers know what to do? There may be an answer to that one. Numberless diverse companies working on their own projects wouldn't be a terribly

Right: Bill McEwen
Far Right: Amino's temporary web site. A mystery.....with a Babylon 5 flavour to it.

reassuring thing to see in the Amiga market right now - the potential of any of them succeeding would be tempered by the possible fracturing of the current market. That is exactly what Phoenix wants to avoid.

Phoenix

If I were to mention the names Mario, Clash and greenboy, you might think I was talking about the latest Nintendo game. You'd probably be expecting me to conjure with names like Yoshi, Bowser and Donkey Kong rather than talking about Amiga luminaries Carl Sassenrath, R.J. Mical and Dave Haynie, but you'd be wrong.

Mario Saitti of Oasis technologies of Cyprus, Clash Bowley of Flying Mice, an American company developing "6DOF" controllers (think mice for a 3D space rather than a 2D desktop) and greenboy, an American musician and ex-Commodore dealer, have come up with an organisation which may turn out to be the last, best hope for Amiga - the Phoenix Platform Consortium.

Like a number of other projects before them, Phoenix aims to provide a reference point for the future path of the Amiga. Their intent, as specified in the statement issued to publically announce the launch, is to

"...assume responsibility for aid and recommendation for reference platforms for the Amiga users who wish to upgrade their present Amigas, as we establish an open migration path to a new platform. That platform will in spirit and in feel be a new Amiga experience while incorporating and surpassing the features found on the desktop elsewhere today."

So why should they be any more believable than the various failed efforts that preceded them? For a start, they have learned from the mistakes of the past. Phoenix sprung from greenboy's dissatisfaction with ICOA, the Independent Council of Open Amiga, set up to perform a similar role, but interfacing between the Amiga community and the then new Gateway / Amiga company. Voicing his concerns, he helped persuade Mario Saitti, Clash Bowley and a few others that they should look at what changes should be made, and how to implement them. Mario told us:

"Our goal was to transform the ICOA from an incomplete development forum into a viable business model for development. The first thing we noted was the ICOA had serious shortcomings over what constituted a developer. The ICOA recognised only programmers and engineers, while we define a developer as anyone that influences a product's journey to market, from the design stage to its sale. We also noted that the ICOA had a fixation for volunteer work and, most importantly, that it orbited and depended on a single company: Amiga Inc."

All Aboard!

Joined by Paul May, they went on a recruitment drive that has added an impressive list of names to the Phoenix charter. You can read through the full published list (membership currently stands at around three times this number) in the news pages. Key names include Carl Sassenrath of Rebol, (and author of the original Amiga kernel) R.J.Mical, one of the lead engineers of the original Amiga development

"...Phoenix are hoping to have developer's boxes ready within a few months."

Above: met@box, Amiga aren't the only peolpe with flashy cases...

team, Wolf Deitrich of phase 5 Digital Products, Dan Dodge of QNX, Andy Finkel and Dave Haynie, ex Commodore engineers working at Met@Box, and Mick Tinker of Access. Familiar Amiga development names such as Holger Kruse (Miami), Greg Perry (Directory Opus), Paul Nolan (Photogenics), Michael Battilana (Cloanto) and several of the key OS3.5 developers should be reassuring, while representatives from companies including Metrowerks, Amino, Motorola and Cisco hints at some useful possible partnerships. The key issue will be how Phoenix can get these companies and individuals working together towards a common goal.

Struggling to find an organisational framework to operate, inspiration came to greenboy in the form of an unusual parallel - the film industry. Mario explains:

"In Hollywood you have a geographical location. For us we have Phoenix. For example in Hollywood, you have agents securing projects, venture capitalists financing projects, producers overseeing projects, all operating within Hollywood's framework. Why is there no computer equivalent? There is nothing tying the people within Silicon Valley together. Phoenix's environment will provide the services that companies and individuals need to communicate in the real and virtual worlds.

"It is similar in some respects to a co-operative. In our analysis of the co-op. model we had actually solved many of the co-op.'s usual problems (votes made by people unskilled or uneducated in a certain area, e.g. marketing voted on by engineers) and thus went with those aspects. For example, we isolate all individuals or companies into categories - software with software, hardware with hardware, marketing with marketing. People make decisions on what they know, and discuss issues they understand."

Although they offer a more solid business plan than some of the blue-skies projects that have gone before, there are two fundamental reasons why

"...at least one Tiawanese motherboard giant is seriously considering taking up the design."

▶ Phoenix has a much better chance of succeeding. The first of these is the people involved. The second, and most important, is that for the first time the necessary technology is available pretty much now. Phoenix are hoping to have developer's boxes ready within a few months.

Phoenix are working closely with QNX Software Systems Ltd., who will be providing the Neutrino Operating System and Photon GUI which was originally going to provide the basis of the new Amiga OS before the decision came to go Linux. Their involvement has brought in a number of companies which were alienated by the Linux plan, and is attractive to many developers as they will offer a next generation Amiga inspired Operating System that runs on a range of modern hardware. QNX seem willing to co-operate fully with the Phoenix consortium, which should ensure the OS is what the Amiga development community wants. QNX also opens up new markets for Amiga developers through their growing partnerships in various computing sectors, including convergence areas such as mobile computing, automotive computing and set-top boxes. According to greenboy, "Phoenix offers an opportunity to developers that don't want to have to develop for a pure start-up desktop solution, but can scale up and down into other things QNX are doing."

Come back PPC!

On the hardware front, PPC seems inevitable. Not only does QNX finally provide the missing piece to justify companies like Phase 5 and Access producing PPC Amiga systems, but the momentum already generated amongst Amiga developers by PPC accelerators can be utilised, and a direct upgrade path will exist for the current Amiga market. Today's

Above: No more, but the MCC has triggered the action

Amiga computers, fitted with a PPC accelerator, will be able to run the next generation Operating System. 68k emulation schemes for PPC hardware will also make providing backward compatibility with current Amiga software a reality.

Another piece of the jigsaw could come in the shape of IBM's new free PPC motherboard designs. IBM's reference design basically takes up where CHRP (Common Hardware Reference Platform, the original IBM / Apple / Motorola open PowerPC motherboard concept) leaves off. Although the current specification has some limits (no USB, for example), it does make the production of cheap PPC motherboards a realistic possibility even for smallish companies. Not that it will necessarily stop there - at least one Tiawanese motherboard giant is seriously considering taking up the design. These motherboards will provide for more than just Linux, and will probably be seen in the future running MacOS, BeOS and, of course, Neutrino.

Of course it's not just about being a rival to the other desktop Operating Systems. Everyone agrees that the key to success with a next generation system is to tie it in with the digital convergence revolution. greenboy assures us that "QNX have promised they will supply QNX and Neutrino work into 'Desktop Convergence', "not just trying to build a desktop, although that's the primary concern... Codecs useful for multimedia are also useful for Set-top Boxes." Competition in this sector is going to be fierce and bloody, but given the partnerships in this sector QNX already have or are developing, Phoenix ought to have a better chance than most.

The importance of Phoenix is that without Amiga providing developers and the market with any kind of leadership on future direction, there is a desperate need for a provision for a unified direction. By bringing together so many companies and individuals from the Amiga community and beyond, Phoenix can realistically hope to achieve that leadership as an umbrella organisation. What's more, they can provide a unified direction which will see a successor to the Amiga classic supported by the vast majority of Amiga companies, putting products using available technologies on the shelves within the same timeframe originally planned for the MCC.

Andrew Korn Ⓐ

Below: The QNX Neutrino Operating System.

Jigsaw Pieces:

|	
Oddly enough, Amiga are the biggest unknown quantity in all this. They don't want to speak to anyone about what they are doing any more, and seem to have disposed of anyone from the company who's job was primarily concerned with communication. They have dropped the MCC, but claim in their last public statement that the Linux based Operating System is still on. They seem to be concentrating wholly on the Digital Convergence market, and presumably plan on producing something appropriate to Linux set-top boxes, although they are probably developing an	abstract operating environment under Java, an interesting direction for Digital Convergence you can read more about next month. It's hard to say anything certain about Amiga at the moment. Gateway seem to have no idea what to do with the company, and it may be felt that the bad publicity that has accrued from recent PR blunders has made Gateway look weak. It's possible that Gateway may now want the Amiga team to get on with it, but without the Amiga name. There are strong rumours that a number of companies have discussed a buy-out.	**Amiga**
By some strange coincidence, the two employees of Amiga Inc. with the strongest interest in the Classic Amiga community were the first two to go. Digital Convergence specialist Fleecy Moss was let go in November of last year, while Software Evangelist Bill McEwen got his marching orders just a day before the announcement of Collas' resignation. Bill and Fleecy were good friends at Amiga, pushing a similar agenda. They don't plan on letting the fact that they no longer work for Amiga stop them from realising those concepts. Amino is the new company set up by Bill McEwen and Fleecy Moss for just this purpose. Their planned business model is not that dissimilar to that of Amiga under Collas, but with a greater short term emphasis on the desktop computing sector. They hope to have reasonably priced single - and multi-CPU workstations, but more importantly a very cheap version to allow compatible low-end configurations. Examples of this might be a games console, set-top box or a	home computer in the A500/A1200 tradition. This low cost platform would also form the basis for their Digital Convergence developments. Digital Convergence is happening rather messily right now and is in need of some kind of structure to make use of it, and this is where Amino think they can make an impact. They'll see some major competition, but they've got a good chance. Fleecy Moss has a firm grasp on the implications of DC, and Bill McEwen's understanding of the human (as opposed to the technical) issues of computing should prove nearly as useful as his scarily long computer industry contacts list. Amino is still a somewhat embryonic venture. They are currently in discussions with a couple of potential partners who could supply some impressive multimedia code and a technically fascinating OS. They're also working on negotiating venture capital, on which the failure or success of the venture will rest.	**Amino**
Met@box is a German company producing set-top boxes, as well as PPC accelerators for the Macintosh (and shortly the Amiga). Met@box are a company with a very strong Amiga heritage, with many people headhunted from Escom when that company closed. Names such as Stephan Domeyer, Dave Haynie, Dr Peter Kittel and Andy Finkel should be familiar to those with a good	grounding in the history of the Amiga. Strongly supportive of QNX, Met@box are looking to develop products under the Phoenix umbrella. Although the nature of their plans isn't public, it's expected that they will work in the set-top box sector as well as reviving their old plans for a desktop Amiga-like system.	**Met@ box**
Never happy with Amiga's attitude towards PPC, phase 5 were amongst the first to tie the knot with QNX. Their G4 accelerators will come with a version of the QNX OS, allowing people who wish it the opportunity to upgrade current machines to the next generation. They also claim to be building a complete desktop system to run the new OS, the AmiRage K2. This is a high-end	system with one to four G4 processors, symmetrically multiprocessing under Neutrino for estimated speeds in the region of a monstrous SpecInt/ SpecFpu '95 benchmark score of 80. They also promise up to 2GB of fast system RAM, cutting edge 3D graphics hardware and full screen DVD, a multi-media DSP co-processor, USB, PCI and Firewire.	**Phase 5**
QNX are the key players at the moment. Their new OS will be delivered very shortly, and promises to provide Amiga functionality to fast modern hardware, with access to many standards not available on the Amiga yet. QNX are an ambitious company with an OS highly respected in the embedded sector but unknown in the desktop. They have many interesting partnerships that could impact on the Amiga situation, such as	a key role with IBM and Motorola in planning a new standard Automotive digital convergence system, and system-on-a-hip support with National Semiconductor. I won't go into too much depth about QNX right now, as we will be covering them in depth in a forthcoming issue. Founded by Amiga exec author Carl Sassenrath, Rebol is an American company just short of 20	**QNX**
people in size, working on venture capital. They have developed the extraordinary network messaging system Rebol (see page 34). Rebol Technologies are fully committed to the	rebirth of the Amiga, and will be offering their software (and, it is widely assumed, multimedia extensions thereof) as an integral part of the equation.	**Rebol**

The Demo Scene On Trial

The under-achieving demo scene stands in the Amiga Active dock, accused of being "a bit rubbish, really." **Tony Horgan** plays Judge, Jury, Executioner - and controversy seeker?

God help any Amiga journalist who describes a demo using the words "swirly," "wobbly," "thumping" or "techno." Don't they realise that these are not merely disposable snippets of eye candy made by/for people on permanent acid trips? No. Demos are the underground art form of the new cyber-millennium, shunned and misunderstood by the establishment, just as all truly innovative forms of expression always are. Or are they?

Case for the Defence

"I put it to you that the demo scene is, and has always been, a breeding ground for some of the world's best coders, artists and musicians. Time after time, demo crews have forced the issue when technical boundaries have arisen. Who could forget the days when one demo after another would break the world record for highest number of sprites on screen simultaneously? Sickly multi-coloured copper-produced backdrops have their roots in the scene, and for that we should be grateful. Where would James Pond be without its puke-inducing rainbow gradients?

"As times moved on and texture-mapped 3D graphics came into vogue, again it was the
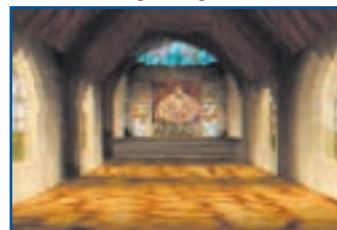
Above and inset: "TRSI - The Rise." Arty, but in a low resolution. Oh well.

demo scene which lead the way, showing that it was indeed possible to make Doom clones for our Amigas. Amiga Quake itself has its roots in the scene.

"The scene pre-empted the current fashion for digital distribution of music years before all of this MP3 malarkey. Mods were doing the rounds of bulletin boards, FTP sites and PD libraries well before any of the big names in the music business cottoned on to the idea.

"Moreover, the demo scene illustrates the very essence of the Amiga: groups of people working together for nothing but pride and the common good, pushing the envelope and expressing themselves in a unique medium."

Case for the Prosecution

"Ludicrous! The demo scene is manned by a bunch of geeks who think it's "hardcore" to program a rotating 3D light-sourced potato, at four FPS, in super chunk-o-vision. By night, Jurgen, Olaf and Kevin metamorphose into TurboMaster, Shadow and NeuroKid, hardwired into a futuristic dimension of cyberspace, emerging only on the occasion that their mum brings them up a plate of beans on toast and a can of coke with a curly straw."

"Once into their alter ego state, they even start to communicate in a different dialect. Rather like those suffering from Tourette's syndrome, who can't help shouting out obscenities at the most inopportune moments for no apparent reason, NeuroKid and Co. involuntarily apply the word "cool" to anything and everything in sight - things that could never be cool even if they were kept in a freezer at the North Pole for a month and then dunked in liquid nitrogen."
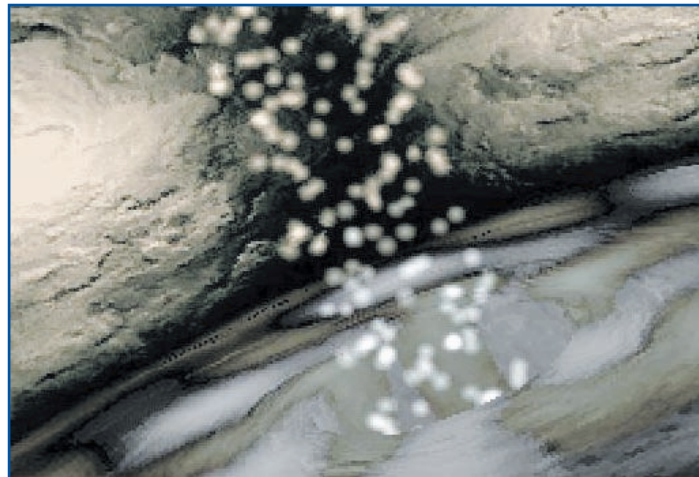
Above: Scoopex 1000% - "wibbly wobbly" or true art? You be the judge.

"Sadly, the "sceners" all seem to have keyboards with faulty Caps Lock switches, making their text appear curiously similar to that style favoured by software pirates. What an unfortunate coincidence.

"'But Tony!', you cry, 'I seem to remember you were involved in the production of a demo a few years ago.' Quite right, the Some Justice 94 Remix, made to promote a re-release of an Urban Shakedown record. 'Ha ha! But that was made with VideoTracker, making you a lamer and not a real scener at all.' Indeed. So it's not about what you do, it's how you do it that counts. What kind of a way is that to judge an art form?

"Cutting edge? You must be joking. The demo scene was ousted from the cutting edge the day Wolfenstien 3D was released for the PC. Ever since then it's been one hopeless game of catch-up. Amiga graphics and sound hardware is so far behind even that of the PlayStation, let alone the latest PC cards or Dreamcast, that any Amiga demo today is plain irrelevant. The best we can hope

for these days is a pre-rendered animation spooling off a hard drive or CD - and even then it still has to be virtually uncompressed in order to keep up the frame rate, and who wants to download 50MB of an animation from the Net that they'll probably only ever watch two or three times at best?"

The Verdict

It's true, the demo scene was once a very exciting place, providing stimulating new audio-visual experiences on a regular basis. However, those days of a demo prompting the comment "How do they do that?" from any but the technically minded are long gone. Sadly, the Amiga is no longer a viable platform for such an art form, and recent years have seen a slump in both quality and quantity of output. If Transmeta ever materialises, that could put things back on track, but for now I have no alternative but to find the defendant Guilty as Charged. The sentence: six months without Coke and the compulsory brushing of teeth twice daily.

Tony Horgan **A**
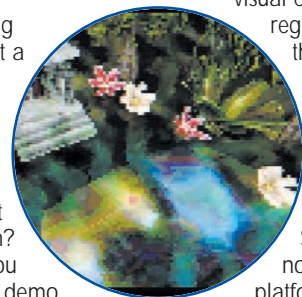
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1 Please tell us how well you think each of the following describes Amiga Active.

	Strongly agree	Agree	Disagree	Strongly disagree
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Authoritative	☐	☐	☐	☐
Clear	☐	☐	☐	☐
Detailed	☐	☐	☐	☐
Educational	☐	☐	☐	☐
Exciting	☐	☐	☐	☐
Fun	☐	☐	☐	☐
Good looking	☐	☐	☐	☐
Humorous	☐	☐	☐	☐
In-depth	☐	☐	☐	☐
Informative	☐	☐	☐	☐
Interesting	☐	☐	☐	☐
Realistic	☐	☐	☐	☐

2 Please score the following sections in this issue: 1=Bad, 3=Average, 5=Great

	Layout	Writing	Interest	Content
News	☐	☐	☐	☐
Back for the Future	☐	☐	☐	☐
In the Dock	☐	☐	☐	☐
Low in Polygon Saturates	☐	☐	☐	☐
OS3.5 review	☐	☐	☐	☐
Masterclass: Candy Factory	☐	☐	☐	☐
PowerTower A4000 review	☐	☐	☐	☐
REBOL with a Cause	☐	☐	☐	☐
STFaxPro review	☐	☐	☐	☐
Movie Players round-up	☐	☐	☐	☐
AmIRC review	☐	☐	☐	☐
AmFTP review	☐	☐	☐	☐
All about Graphics Cards pt.2	☐	☐	☐	☐
Active Shareware	☐	☐	☐	☐
Active Gamer	☐	☐	☐	☐
WipeOut 2097 preview	☐	☐	☐	☐
VGP review	☐	☐	☐	☐
FoundationDC review	☐	☐	☐	☐
Gremlin CD review	☐	☐	☐	☐
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Active Shareware	☐	☐	☐	☐	☐
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Low in Polygon Saturates

Lambda designer **Joe Fox** takes you on a guide to healthy game modelling.

Below: Lighting and texture are your friends, polygons are the enemy...

There are ancient Aborigine tribes living in the deeper, remote regions of the Australian outback who know little of consumer electronics, digital watches and pay per view television, and yet the chances are they've played Quake or Wing Commander at some point or other in their lives. Like it or not, 3D is the current bread and butter of the games industry and has been for quite some time. As processor speeds approach the Gigahertz (1,000 MHz) region, and graphics cards spew out millions of polygons per second, those of you wishing to wade into the rushing torrent of 3D games development, especially for our beloved Amiga, need to be especially prepared in order to compete.

The truth is, power breeds complacency. Take the PC for instance - walk into any high street games store and examine one of the many regiments of latest 3D titles on offer. The chances are you will find something like "minimum spec: Pentium II 450MHz, 64MB, 3dfx required." In other words, a system that was the top of the range only a few months ago, is now the minimum requirement. This rapid escalation gives rise to the aptly named "bloatware." The hardware can process huge amounts of data, so developers, in the interests of time and money (or perhaps sheer laziness!), fling ever more complicated routines and data at the system. Given a little extra time and a modicum of care, most of the latest 3D games could be refined to use a fraction of the resources they do now.

The Amiga is living proof of this. Perhaps one of the few advantages of having a technology that has remained static for over 5 years is that developers have learnt to squeeze every last ounce of power from the ageing hardware. No one imagined a few years ago that Doom, let alone Quake would ever been seen on the Amiga. Now, with a plethora of upcoming PPC G3 and G4 processors, and the availability of Permedia and Voodoo 3D graphics hardware, the Amiga is on the verge of a gaming revolution. Even if we never quite get ahead of the latest technology, the Amiga could still easily outshine the competition, given that developers maintain their mantra of Efficiency and Refinement.

The Benefits

In any 3D game, graphics play a key role not only in the look, but also the quality of play. Complex 3D objects may look spectacular, but if they are only being rendered at 10 fps (frames per second), playability goes out of the window and the game will most likely fail. Speed, therefore, is one of the most important variables in a 3D game. A more efficient model, with fewer polygons, can be rendered more quickly, sparing precious processor time to perform other tasks. If you halve the number of polygons in your objects then you gain the capacity to display nearly twice as many objects on screen. Believe me, a few extra enemies can make a world of difference to the gameplay! Fewer polygons also means less memory overhead - allowing you to lower the minimum required specification for your game or to provide the room for a greater diversity of graphics and sound. The same is also true for disk space and gaining a few extra Megabytes allows you to cram more files onto the game CD.

One might think that the visuals would suffer as the result of skimping on polygons, but on the whole, simpler objects can be rendered more accurately (thus, no disappearing walls or enemies). Although such artefacts can be limited with special routines (e.g. "z buffering"), these can create a large processing overhead, which you may not be able to afford. Hardware 3D acceleration may give you more power to play with, but the equation remains the same; if your models are more efficient, the game can go faster or include more features.

It is important to be able to strike a balance between the simple and the aesthetic. The polygon count needs to be low enough to ensure that the game runs smoothly, but not so low as to make your objects resemble textured bricks. This calculation is made more complex by timescales - if you make your calculations based on today's average hardware, by the time you've finished the title it is likely to look rather dated. Make your decision as to what hardware you will be aiming at and decide how many polygons you can afford for each object. Remember that fine details can be added to texture maps instead of the object meshes. Of course, there are always exceptions - sometimes a little more detail is worth the overhead, so you really need to assess every situation to find the best formula. Always keep playability in mind, and you can't go far wrong.

Many Amiga users experiment with 3D rendering packages these days. Aminet is full of fantastic examples of many people's own individual work. However, the transition between ray-tracing and game modelling is not all that easy. It requires a whole new set of disciplines and skill at working with points and polygons at a far lower level.

Above: Fewer polygons than you might think... a development screenshot from the PC & Amiga game Lambda.

There are very few packages on the Amiga these days that allow a graphics artist to create and manipulate a decent game model. Lightwave 3D is by far the best for this purpose, the only drawback being its hefty price tag!

You can forget about using functions like nurbs, metaform, splines or polygon reduction macros to help you create your model. Alas, building it up polygon by polygon is the only real way to do it. Tedious, yes, but it keeps the polygon count low, and prevents errors from creeping in.

Remember that 3D game engines tend to be very fussy beasts - they may not happily render all of the objects you throw at them and many will have limitations to the number of points in any given polygon. Most need the polygons to be planar (flat) and "convex" rather than "concave." Some will produce errors if a polygon's face is too close to another's and some just produce errors, full-stop! So, on the next spread, I'm going to show you how to make sure any problems you encounter are likely to be your coder's fault - not your own... ▶

Decieving The Eye

The art of low polygon modelling is essentially to make less look more. This is often done by hoodwinking the player into perceiving detail that doesn't actually exist in the model. There are many popular 3D titles that make a very good job of this. Here are just a couple...

Mario is a masterpiece of efficient modelling and minimalist texturing (it has to be, the space on a Nintendo64 cartridge is limited). What he lacks in looks, he makes up for with expression. Fluid, realistic character animation can give an object a life of its own. Mario also demonstrates an important lesson in 3D modelling - the more realistic the modeller tries to be, the more critical the viewer's eye will be. Aim for a cartoon, and no-one can accuse you of getting the anatomy wrong!
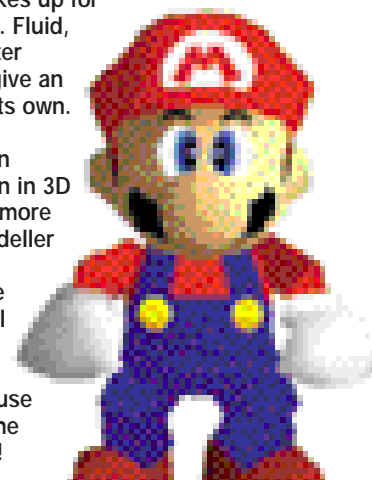
We only have to look to Tomb Raider to see what clever modelling, texturing and animation can do for a 3D object. Far be it from me to ruin your fantasies, but Lara Croft is only a collection of points and polygons. A simple model maybe, but with "curves" in the right places, realistic texturing and beautifully animated hips (errrm, I mean movement). Lara also provided the inspiration for a famous anecdote about character modelling - you may have thought the mini backpack was a fashion statement, but it's merely a clever way of covering over an ugly join in the mesh.
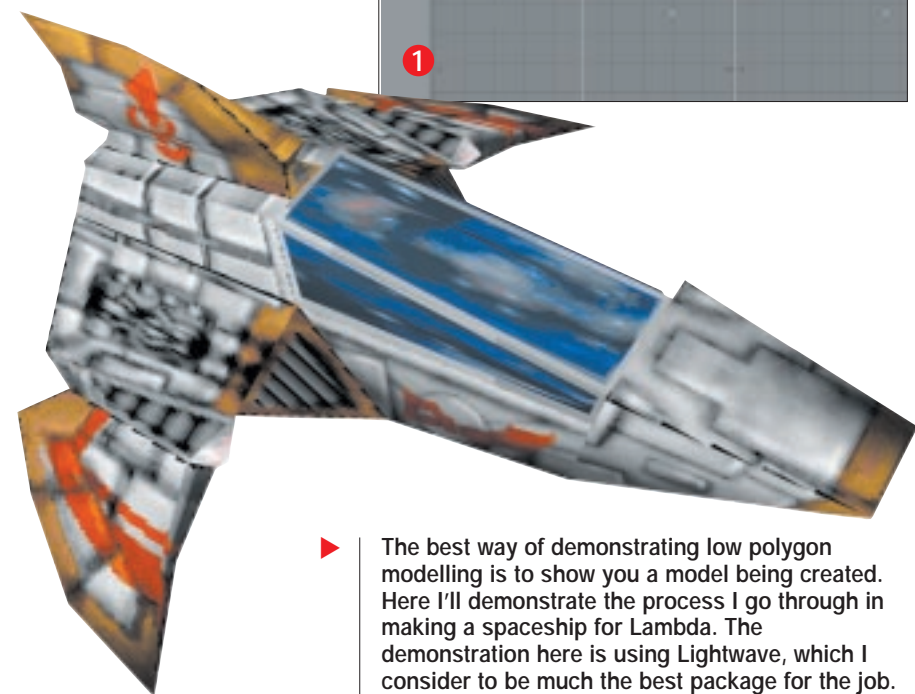
Not all Fun and Games

It's not just games that benefit from polygon frugality. For the best examples of Low Polygon Modelling, we only have to look at "The Scene". A close knit circle of brilliant coders and graphical artists, they spend hundreds of hours doing nothing more productive than pushing the last ounce of power out of a computer system. The whole purpose of a demo is to make people stand back and say "wow, how did they manage that on a bog-standard A1200?" This can only be achieved by taking great pains to economise and optimise everything, including the polygon count.

The Internet can also benefit from a low polygon diet. Although VRML (Virtual Reality Markup Language) has fallen by the wayside somewhat, there is a demand for small clean 3D models in an environment where file sizes are critical. The advent of broadband transmission will ease this problem, but will also increase demand. With more "multimedia" data being transmitted over the 'net and browser plugins such as Shockwave Flash 3D on the horizon, a 3D designer with skills in low polygon modelling will be in much demand.

Below: One to watch - Muse3D, Muse Corporation's realtime multi-user browsing environment, a glimpse of the future.

Textures

Now that you've completed your model, you'll need to think about textures. Every game engine has a different way of handling them. Some use skins (large textures that wrap around the whole object) others use surfaces (like Lightwave). All of them will have special requirements for palettes, sizes and formats - make sure you know what they are. Here's a sample of the textures I created for the tutorial ship, using several surfaces.


► The best way of demonstrating low polygon modelling is to show you a model being created. Here I'll demonstrate the process I go through in making a spaceship for Lambda. The demonstration here is using Lightwave, which I consider to be much the best package for the job. If you use Cinema4D, Imagine or whatever, you'll find the basic techniques are the same; of course there is no room for me to detail exactly how to do this in each software package. Although the final model is relatively simple, you do need to understand the way your 3D package works - this is not a guide for the absolute beginner.

1 Using the Polygon-Points tool create a template cross section for the fighter's fuselage, position your points at -2.5m on the z-axis. This fighter will be symmetrical, so you can save yourself time by creating one side and using mirror on the x-axis. Once you are done, select the points in a clockwise order (this ensures the face will be towards you) and click Polygon-Make (or press 'p'). After making sure
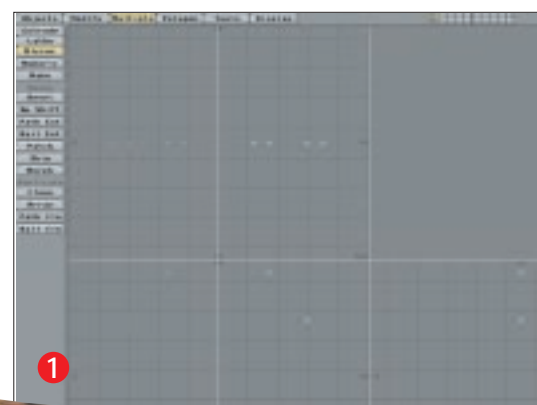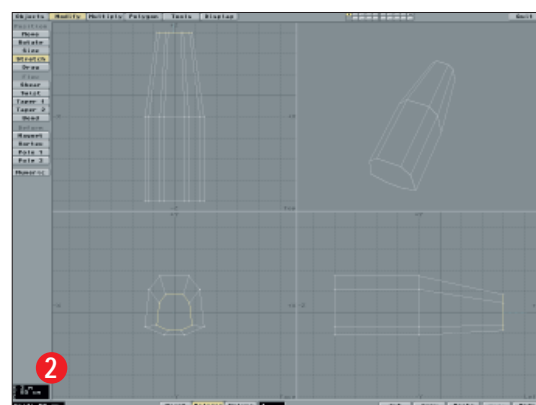
the polygon is selected, tap Multiply-Extrude ('n') to bring up the numeric requester and enter these values before hitting 'Enter' to make it:

    axis = Z
    segments = 2
    extent = 4m

2 To make it a little more angular, select the furthest end poly on the z-axis and Modify-Stretch ('h') and then bring up its numeric requester ('n'):

    x = 0.6   0
    y = 0.6   -25cm
    z = 1   -1.5cm

Now hit '=' to hide everything but the selected polygon, followed by 'a' to make it fill every viewpoint. In the face view select the bottom point on one side, the inner point first, and then the outer. Hit Ctrl+'w' to weld the points together. Repeat this for the other side.

3 Now we'll start on the nose cone. Use Polygon-Points again and place a point at x=-40cm y=45cm and z=1.5m. Mirror this to the other side as well.
Select the 4 outermost points in an anti-clockwise order and Polygon-Make ('p'). Select the new polygon and Multiply-Bevel:

    Inset = 20cm
    Shift = 1.25m

The six-sided poly is now redundant, so you can select and cut it. Press '\' and you'll see that the fuselage is beginning to take shape.
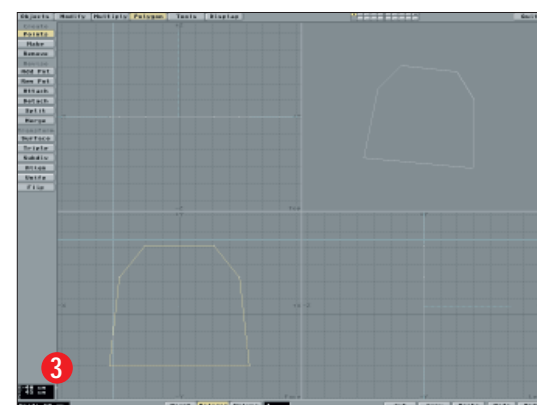
4 We now have to attach the nose to the fuselage. We'll need to create five polygons for this - any less would produce concave shaped faces, which a lot of 3D engines can't handle. Select (clockwise) and Polygon-Make ('p') each set of points as shown
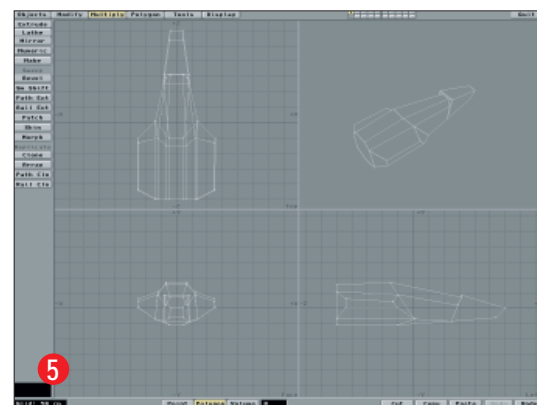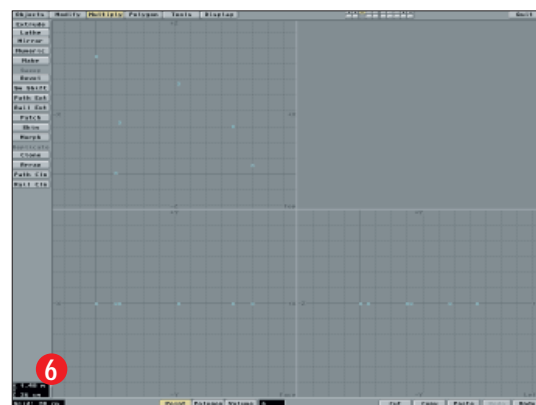
above. Press 'a' to fit the whole object in view - looks a bit crude doesn't it? Don't worry. To give it a sleeker aspect we just have to "tweak" a few points. Remember that if we stick to using the Drag tool in the left viewpoint, then we ensure that the ship remains symmetrical.

5 We'll add the engines and some fancy air intakes (before anyone says it, this ship can fly within an atmosphere). These can be simply created by bevelling the side polygons with and inset of 30cm and a shift of 60cm.

6 Now we have the basic shape of the fuselage we can turn our attention to the fin and wings. Move to a spare layer and select the Polygons-Points tool. Now create a shark's fin shape with an area of about 2m x 1.5m in the top view. Around six points should be enough, but feel free at add more - just bear in mind that this would increase the poly count. You can adjust the shape using Ctrl-'t' Modify-Drag until you get the smoothest looking "curves".
Make sure the points are anti-clockwise selected and hit 'p' to make it. Press 'r' to rotate the wing 90 degrees. Use Polygon-Triple to a) Reduce the number of points per polygon, b) Reduce the size of each polygon, c) Keep them planar during the following operations...

7 To add dimension to the wing, we'll use the Multiply-Lathe tool on the Z-axis. Position the cross hair over the very tip of the wing in the Face Viewpoint. Now press 'n' to bring up its numeric requester:

    Start Angle = -5cm
    End Angle = +5cm
    Sides = 1
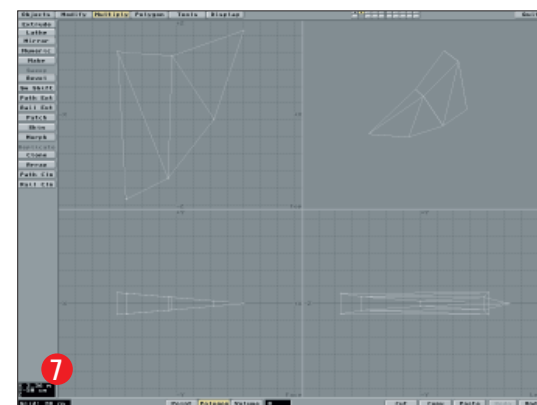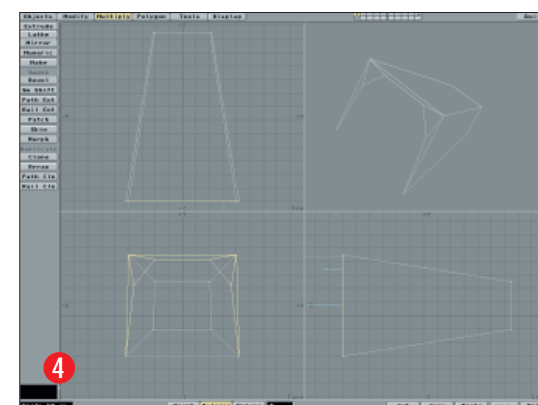
Click "ok," copy the whole wing and paste it onto the same layer as the fuselage. Use the Move tool to position the wing section next to the "engines" (leave a small gap though). Select the two opposing polys from the wing and the hull, make sure they are both aligned (facing the same direction). Use Multiply-Skin to join them together. Hit 'x' to cut away the redundant polygons. To do the other side, select the wing section (including the "skin") and use mirror and then Tools-Merge.
The final touch is the tail fin. We can re-use the wing object, which should still be in another layer. First, we need to bevel the top of the fuselage (like the engines in step 6) - use an Inset of 20cm and a Shift of 20cm. Now copy and paste the wing into the current layer, and rotate it -90 degrees (by hitting 'e' while it is selected). Use Modify-Stretch and enter Y=0.5 as the scale factor - this will halve the height. Position the fin above the fuselage and create a skin between them. Remember to delete any redundant polygons.

8 Finally, in Polygon mode hit 'w' to bring up the Statistics window. Click the "+" button next to the "non-planar" field. This will select any polygons that are no longer on a level plane. Click Polygon-Triple to fix them. Congratulations, you've built a space-fighter!
Joe Fox **A**

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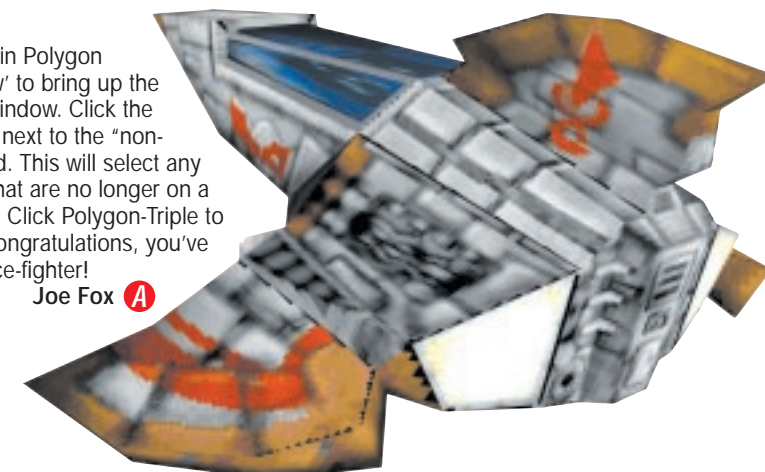WEBSITE: http://www.amiga.de/amigaos35/

Amiga OS 3.5

It has been a long time coming, granted, but is the latest operating system upgrade for the Amiga worth it?

"OS 3.5 needs to provide an upgrade for all users without conflicting with existing software."

Five years is an aeon in computing, yet that is how long we have waited since the last official update to the Amiga's Operating System. There have, however, been many unofficial improvements to AmigaOS. These have ranged from small utilities and patches to improve system functions to complete Workbench replacements. This caused something of a dilemma for Amiga. They wanted to help keep the Classic Amiga market alive by releasing an improved operating system, but they didn't want to kill sales for our few remaining developers. OS 3.5 needs to provide an upgrade for all users without conflicting with existing software. How well does it do this?

First steps

OS 3.5 is designed as an upgrade from 3.1; it needs the 3.1 ROMs to work correctly. Unlike 3.1 itself, you need the actual ROM chips - soft-kicking from a ROM image won't work. Most dealers will be offering a special price on 3.1 ROMs when bought with the 3.5 CD. The CD also contains a full Workbench 3.1 installation, which you should run if you are upgrading from 3.0 or earlier. The 3.5 installation runs in two stages with a reboot between them. It's very straightforward, just follow the prompts. Since it's not possible to boot from a CD (this would require new ROM chips) the installer creates an emergency boot floppy disk. In the event of a hard drive failure and loss of your boot partition, this disk will mount your CD drive and enable you to effectively boot from the OS 3.5 CD, so put it in a safe place once you've created it.
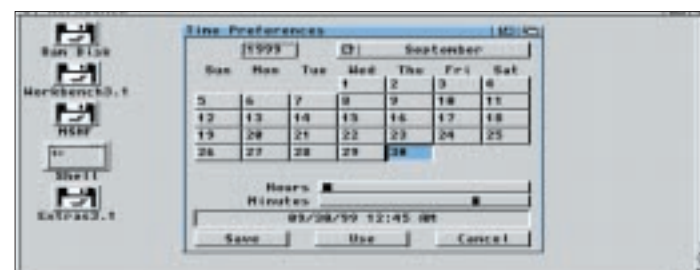
OS 3.5 sports an updated GUI engine. This is the software used to generate the GUI elements of windows, buttons, sliders and other gadgets. The GadTools system of OS3.1 was definitely showing its age. The new GUI is called Reaction and is a development of the ClassAct system. This builds on the standard classes of GadTools, providing a high level of compatibility between old and new software. Some may have preferred MUI to be used instead; it has both advantages and disadvantages. However, MUI works with OS3.5, as should all your existing MUI software.

There is full documentation for Workbench, AmigaDOS and ARexx, in English and German. This is in the form of HTML files and appears to be based on the 3.1 documentation. The documents are comprehensive, but don't take much advantage of the HTML format. More hypertext links and inline graphics would make things clearer, as would splitting some pages into more manageable sections. Some of the files are almost a megabyte in size and take a while to load.

Workbench

The changes to Workbench may seem cosmetic at first glance. Look closer and there are significant improvements. We are no longer restricted to using the mouse to control Workbench; it now has full keyboard control. Press the tab key to start keyboard control, this highlights the top-left icon in the active window (or the Workbench backdrop). Then the cursor keys move from icon to icon and the usual RAmiga-O opens the selected one. Using the cursor keys without pressing tab first scrolls the window contents instead. If keyboard control isn't enough for you, Workbench now has an ARexx port too. This opens up a huge range of possibilities. For example, the search engine on the Amiga Active CD will open the Workbench window of any found file by clicking on the name; previously only Directory Opus users had this luxury. Another useful option would be a script to close all by the active window, attached to a function key using the FKey commodity.

After working through several directory levels to find the drawer you need, you usually end up with a Workbench cluttered with unnecessary windows. With the touch of a key, you can close all but your final destination window. Beta testers have already written several useful scripts.

A stock OS 3.1 Workbench is incredibly basic (that's polite for ugly); four colour icons belong in the Ark. There have been various attempts to improve matters, notably MagicWB and NewIcons, but these required each user to be running a system patch. OS 3.5 handles icons of up to 256 colours and takes care of any palette mapping issues. These 256 colour icons are noticeably faster than NewIcons, because it's properly integrated into the system icon handling now. Graphics card users can make Workbench use Fast RAM for icon imagery, providing a further speed increase. There are utility programs on the CD to convert old style (including MagicWB and NewIcon) icons to the new format. NewIcon icons will work without the NewIcons patch in user-startup, converting your old icons to the OS3.5 format is the best long-term option. Converting MagicWB icons eliminates the need to run the MagicWB daemon or any palette locking programs.

In implementing the new ▶

Above: A stock 3.1 Workbench. Basic and ugly, isn't it? We're sorry for making you look at it again. Hopefully this will be the last time.
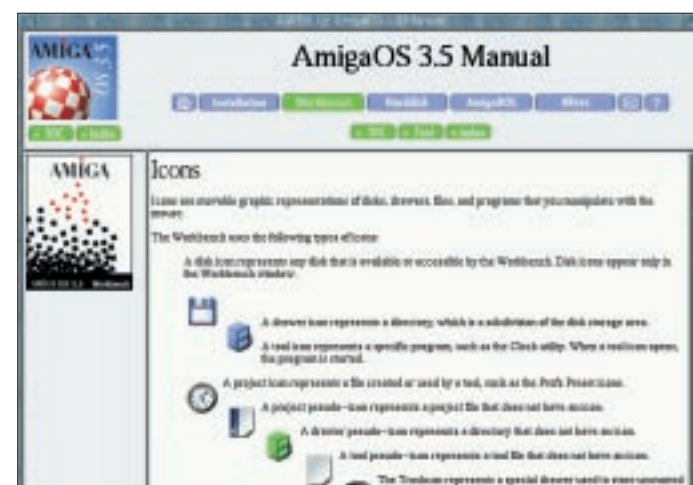
Above: The HTML documentation included with OS3.5. While this section has some illustration, most of the information is pure text.
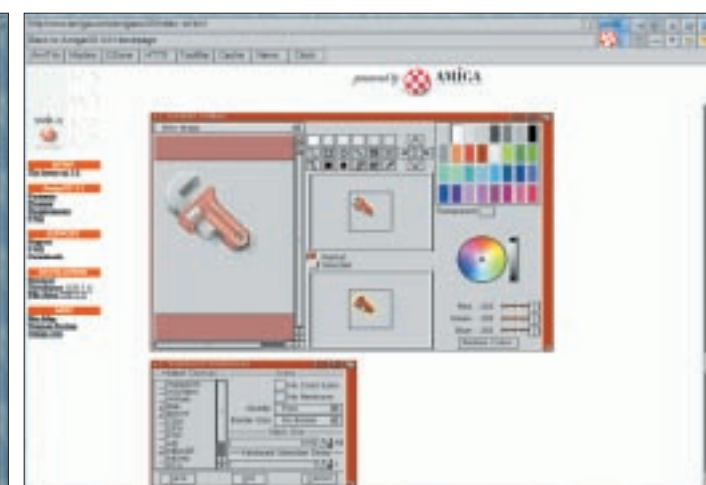
Above: The web browser, showing Amiga's web site, showing previews of OS 3.5. Recursion in action. The web browser, showing Amiga's web site, showing... oh, sorry.

"If keyboard control isn't enough for you, Workbench now has an ARexx port too"

icon system, Amiga have changed the way programs access icon data. This means that some programs that load images from icon files no longer work with NewIcons imagery. This mainly applies to AppIcons, Directory Opus displays the icons in its Workbench Windows correctly, but AppIcons show the non-NewIcon image and toolbars don't work with icons that only use the new style, those that have been converted from NewIcons. GPSoftware have promised an update for Opus once 3.5 is released, but it affects other software too. If the developer has left the Amiga market, there's no chance of getting older software fixed, so a small system patch will be needed to deal with this.

With recent increases in hard drive sizes, the 4GB limit of FastFileSystem (FFS) became a real problem. This release includes updates to both FFS and scsi.device. The new scsi.device handles CD-ROM drives with no need for extra software, and the updates are applied by SetPatch, which then reboots the Amiga. Your Amiga will only reboot when booting from cold, after which the new software stays in memory.

HDToolBox and the format command have also been updated to handle the larger hard drive sizes.

Networking

Networking should be an integral part of any modern operating system. OS 3.5 will come with a TCP stack, the underlying software used to talk to a network, a web browser and a basic email program. The TCP stack should have been a special version of Miami; instead, it will ship with Miami 3.2beta demo version, with a Reaction GUI. It appears that this was due to lack of time.

Miami is a good TCP stack. Many people (myself included) are already using the standalone version of Miami or its Deluxe brother. In most respects, this version of Miami is quite sufficient - most of the disabled features are not needed for basic networking or Internet access. However, it will only go online for an hour at a time. This is fine for an evaluation version, but it's really not good enough for an integral part of an operating system. Haage & Partner hope to have the special version available for download by the time OS 3.5 reaches end users.

The web browser is AWebSE, based on the forthcoming AWeb 3.3 release. It has some features
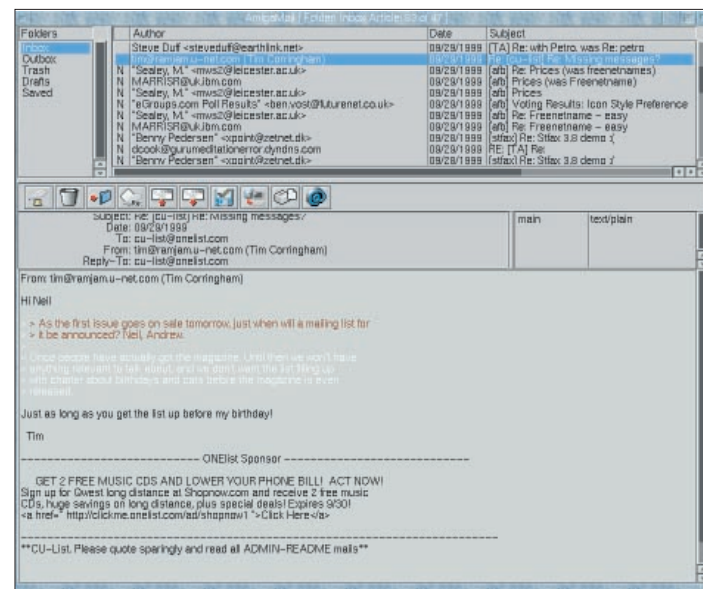
from the full version disabled, but also has features added that make is especially suitable for its other task of displaying HTML documentation. AWeb is a powerful browser, with a wide range of features. Its HTML rendering is particularly good and the SE version comes with some useful additions making use of the new Reaction GUI. This is a "Lite" version, Amiga don't want to kill sales of this or the other browsers. The main restrictions are that you cannot save sites to a hotlist, you cannot make graphical printouts of pages (although the supplied

HTTX program does a good job of converting pages to text and printing them) and there is no SSL (Secure Socket Layer) support which is needed for secure connections to certain web sites for submitting order details for online shopping or altering password settings for an Internet account, for example.

AWeb's GUI can be customised - the fastlink buttons and standard browser navigation gadgets can be changed or removed. This is useful when viewing documentation from disk; transfer animations and URL gadgets are a waste of
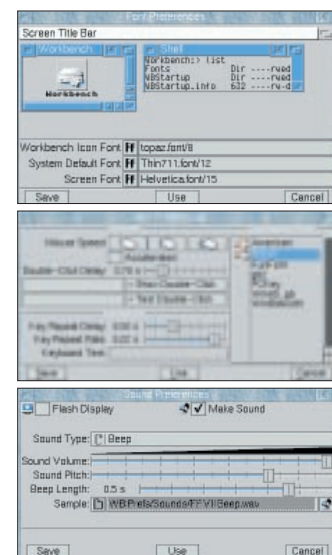
Above: A new preferences editor to configure the appearance of your new Workbench.
Left: Complemented by (from top to bottom) new Font, Input and Sound preferences.

"colour printing now handles the full 16.7 million colour range of 24 bit images"

space in this situation. AWeb can also run programs and ARexx scripts from links within a document. This is extremely useful for program documentation, and is used to good effect on our cover CDs.

The supplied e-mail program is very basic. It appears to have no option for writing mail offline for later sending, and there are no facilities to filter mail into different folders. It's OK for the occasional mail, but that's about it. Its best feature is that the underlying mail handling functions are in a shared library. This means that programmers could easily build e-mail capability into their software. Imagine being able to write a letter in your favourite word processor and then send it out as an email or how about extending the standard mail merge capabilities of a database program to send the letters as e-mail. As permanent Internet connectivity becomes more popular, through the likes of ADSL and cable modems, integration like this will become increasingly important.

Printing

This is one area where AmigaOS had been left well behind. Modern inkjet printers are capable of far better results than the old printer.device could put out. Printing has been improved with OS 3.5, colour printing now handles the full 16.7 million

colour range of 24 bit images, as opposed to the previous 4096 colours. The printer drivers will make use of a PowerPC if available, to give a further increase in speed.

The printer preferences have been tidied up into a single program, giving simpler control over the settings. Third party parallel and serial ports are now supported and you can configure up to ten units for printer device. This is useful for those with more than one "printer", even if one of them is a fax program or a unit using the FilePrinter driver. This does require the printing software to allow you to specify the printer unit; most are hard coded with unit 0, although this

should change as OS 3.5 gains acceptance. All very good but, and it's a big but, the printing improvements are negated by the lack of new drivers. 3.5 only ships with drivers for Hewlett Packard DeskJet and LaserJet printers, plus FilePrint and PostScript drivers. Older drivers are still usable, but may not take advantage of the new abilities. Haage & Partner say this is a result of the short time available to complete 3.5, that there wasn't time to write drivers for other printers. This may be true, but it is disappointing news for owners of Epson and Canon printers. New drivers may well appear after OS 3.5 is released, but nothing is certain.

New standard

OS 3.5 also redefines the base hardware level of the Amiga. Developers have either had to work to a base specification of the A1200, or give individual requirements for each program. OS 3.5 sets the base level at:

• **68020 CPU**
• **6MB RAM**
• **Hard drive**
• **CDROM drive**

Most new features would be fairly useless on a lesser machine anyway, but it does mean developers can now state "Requires AmigaOS 3.5" and be sure the Amiga has a CD-ROM drive and a fully 32 bit processor.

Is it worth it?

Haage & Partner have worked a minor miracle to get OS 3.5 out by now. The number of changes, enhancements and bug fixes is far greater than you would think from looking at a few screenshots. The included Internet software is functional, more than enough to get you online easily. Serious users would want to upgrade to full versions of a TCP stack and browser and look for a better e-mailer. Overall, it is a solid upgrade; it's just a shame that we didn't get it two years ago.

Neil Bothwick Ⓐ

Finished!

The final CD was being mastered as we went to press and will be released on October 18th, including the CyberGraphX 3 RTG software package. There was a lot of disappointment when Amiga announced that OS 3.5 wouldn't include graphics card support. It's good to see they were able to arrange inclusion of CyberGraphX at the eleventh hour. There are also a range of third party contributions,

ARexx scripts, icons and backdrops on the CD.

It's clear that Haage & Partner were really working against the clock on this. OS 3.5 has been talked about for a long time, with Amiga saying it's on, then it's off and then on again. Real work only started fairly recently. I expect that testing and fine-tuning will continue after the release, and that updates will be available later. To an extent this depends on how many people buy OS 3.5 - if sales are low there will be less incentive to continue working on it.

OS 3.5   8/10

SUMMARY: Improved Workbench control, networking and Internet software, 24 bit printing and many bug fixes - but a limited range of printer drivers. The inclusion of CyberGraphX is a pleasing one. Further additions should be released over the coming months. It's just a shame it didn't arrive two years ago.

The alternatives

What happens if you are already running system enhancements? OS 3.5 ran well on my heavily patched A4000, running Opus Magellan in Workbench replacement mode, CyberGraphX, TurboPrint and a heap of patches. Opus works well with OS 3.5, with the exception of the handling of AppIcons. GPSoftware

say this will be fixed shortly. TurboPrint also happily co-existed with 3.5, and solved the lack of an AmigaOS driver for my Epson printer. Some of the new features of OS 3.5 are redundant when using Opus or TurboPrint (and probably Scalos too) but many of the improvements and bug fixes are as important for those with Workbench replacements as for everyone else.

Opus and Scalos only replace the Workbench. AmigaOS 3.5 makes much deeper changes.

I was surprised to find that OS3.5 ran well from first installation, considering the number of hacks and patches I run. The backward compatibility is excellent. Although many of those patches are no longer needed, it was good to find that I could

run with them while I decided which to get rid of. While there is no RTG software included with OS 3.5, it is designed to be more compatible with graphics cards. 24 bit datatypes and the option to use Fast RAM for images certainly gives Workbench a noticeable boost in speed for users of graphics cards, which is good to see.

Making the most of Candy Factory Pro

You may have thought that Candy Factory Pro was just about making text look pretty, but it can do a whole lot more.

Candy Factory Pro is an excellent little program by Milan Polle which has grown from its shareware origins into a classic Amiga graphics utility. It works a little differently than pretty much anything else, and can produce some stunning results with incredible simplicity. However there is a danger with Candy Factory - it is so easy to get great results with just a few mouseclicks that it's easy to get distracted from trying anything terribly different.

Principally, Candy Factory Pro is about making beautifully rendered text logos, but the uses certainly do not end there. Candy Factory works by rendering two planes, consisting internally of bitmap masks. When you enter text into the text gadget, chose a font, size and so on, Candy Factory renders this as a smoothed bitmap on the "object" layer, leaving the "background" layer behind it empty. However, there is no reason why the "object" layer bitmap should only contain text.

Under the Project menu, you are given the option to "Load Mask". This allows you to import any 256 colour greyscale IFF image as the "object" rather than using text. By creating your own mask, you can use the tricks and effects in Candy Factory Pro to render out symbols, icons, buttons and so on. The following projects should give you some idea of the kind of effects Candy Factory can create. All that is required is a little imagination, so allow *Amiga Active* to inspire you...

Candy Factory Dissected

If you thought images produced in Candy Factory Pro have a distinctive look, think again. You can produce some surprisingly complex and unusual images if you understand the parameters well enough. The picture described here is an illustration of some of the less obvious things you can do with Candy Factory. You'll find the project on this month's *Amiga Active* CD if you'd like to try it for yourself or play with the settings.

1 The object has been given a glow that is within the tonal range of the background. This means it is only really obvious over the dark areas. The glow is similarly coloured to the object itself, which makes the object appear radiant. A similar hue for the object colour and ambient colour adds to this effect.

2 Water is generated using a fractal turbulence bumpmap, with a large X size and a small Y size. In the materials submenu, the ambient colour is set to a dark green and the object colour is a lighter blue. The specular colour is a much brighter blue, giving the appearance of a strong, contrasting light which matches the glow of the object itself.

3 The object mask has a grey rather than a black "AA" shape in the middle. This gives the glassy see-through effect rather than the normal appearance of a hole, allowing the water pattern to be visible behind it.

4 A turbulence bumpmap is applied to the object. The bottom clip is set until only the
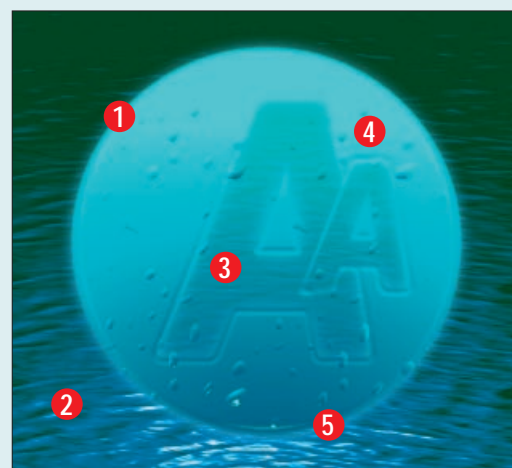
rounded tops of the turbulence bumps are visible. This creates the appearance of water drops, subtly hinting that the object has just risen slowly out of the water.

5 The light source is placed right at the bottom of the image and set to a small distance. This gives the impression that the light source is the object itself, brightening a little of the water around it.

Sweet and Simple: The basics of candy
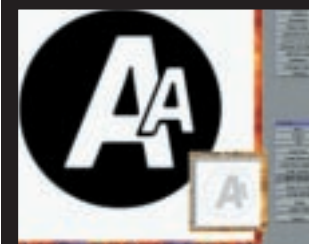
The first thing to do is prepare your mask. Leave some white space around the image, as things can get a little messy at the edges - you'll need a little space to crop out. White pixels make up the object, black pixels let the background show through. Intermediate tones are semi-transparent, so anti aliased edges will appear smoother. Output the mask as a 256 colour IFF.
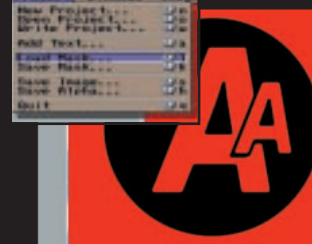
In Candy Factory Pro, load in the image you have just created by selecting "Load Mask" from the Project menu. Worth remembering is that, depending on what you want to do with the image, you can change foreground and background colours by selecting "Invert Mask" in the Image menu.
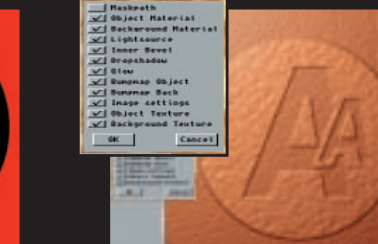
You can now proceed as normal to make your final image. You can apply a saved project to the mask, either one of the default projects or one that you have made previously and saved. Select "Open Project" from the Project menu and make sure that the "Maskpath" option is not selected in the Option selector. If it is, the mask used in the project will replace yours.

Button Candy
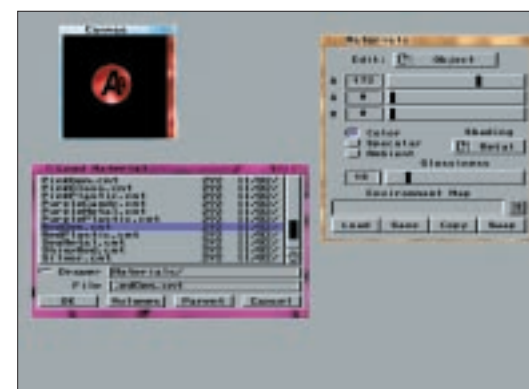
This project uses a small version of the mask, as I am making web site bullet points. The mask is loaded in and a material is applied to the object.

1 Because we want a white backdrop for the web page, the background colour is set to white. Set the shading to none and the Red, Green and Blue values of the colour option to 255. I've also added a bumpmap to pick up highlights.

2 A light source is placed directly 'above' the button. A drop shadow is added and the values are tweaked until it looks just right.
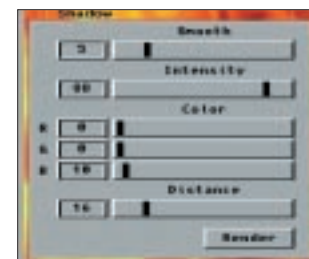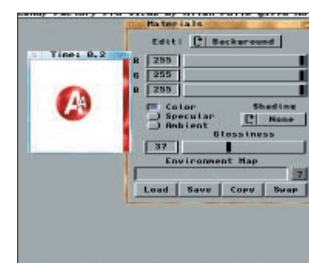
3 The picture is saved (remember to select the "refine shading," "texture" and "bumpmap" gadgets). Then the Y position of the lightsource is altered and the image saved again. I repeated this step with the lightsource at positions 0,-60; 0,-30; 0,0; 0,30 and 0,60 to produce five images with two different lengths of shadow above the button, two below the button and one with no shadow at all (produced by using overhead lighting).

4 Judicious use of the Javascript onMouseOver tag allows me to replace the images in a web page depending on which bullet point the mouse is sitting over - the further the button from the one the mouse is over, the longer the shadow. The effect is as if the mousepointer is a lightsource, causing the bullets to cast a shadow on the webpage - you can see it in action on this month's *Amiga Active* CD.

Andrew Korn A
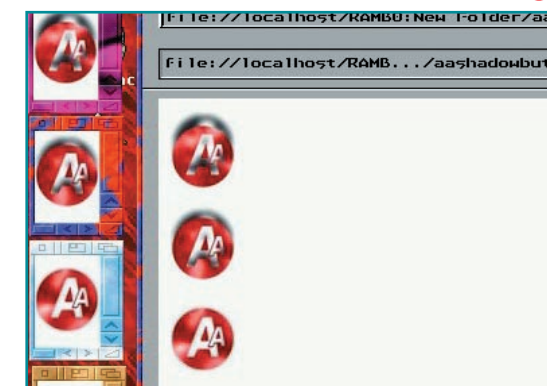
Buying Candy Factory

If you haven't already bought Candy Factory Pro and this article has made you think you'd like to, you'll find that many dealers stock it. Candy Factory Pro is published by Motion Studios / Titan Computer and distributed in the UK by Epic Marketing - 'phone +44 (0)1793 514188 for more information. The current UK price (excluding P&P) is £34.99

Dare you enter the A4000
TOWER of
POWER?

Is your A4000 feeling cramped? Power Computing have the answer.

You haven't still got one of those pokey desktop A4000s have you? You've obviously not expanded it then. Just trying to put a CD-ROM, and extra hard drive and a Zip into its already-cramped casing would convince you that it's not really worth bothering. So what do you do? Give up and go home? No, you can't do that - you're already *at* home! All is not lost - your A4000 just needs a new place of residence, so how about moving it into a brand new skyrise?

The Power Tower A4000 case is far from petite: It's almost wider than it is tall, and you could probably fit a small, supple pygmy into one without too much fuss, should you have one to hand. If you haven't, you'll have to use your A4000's innards instead.

The Power Tower comes with a good set of instructions on how to install your 4000 into its new home, but you may not be convinced that it's the right move until you've stumped up

let's start by dismantling the desktop version of your A4000. Shed no tears, for it's going to be happier with some space around it.You'll need to make sure you're not charged with static and that you have the necessary equipment - a philips screwdriver and a pair of long nosed pliers are all that you should need.

Out with the old
1) Unscrew the two screws at the back of the A4000's casing, and remove the cover. Looks cramped doesn't it? Not for much longer.
2) Carefully disconnect and remove any hard drives, Zorro cards, accelerators and other add-ons. You'll also need to disconnect the LED leads (labelled "KEY," "PWR" and "DISK") from the motherboard and remove the A4000's front bezel by pinching the plastic clips together and pushing them out.
3) Next, undo the two screws on top of the metal bar that holds the Zorro daughterboard in place and gently remove the bar and board.

your hard-earned cash, so here's the *Amiga Active* step-by-step guide to re-housing your A4000 in a Power Tower to help you decide if it's the best option for you.

Okay, assuming you haven't strained your back after unwrapping the Power Tower and lifting it onto your desk (for it is a hefty beast),

4) Unplug the power supply header from the motherboard and unscrew the two screws in the back of the case that hold the PSU in place. Slide it forwards until it frees itself from the base of the case, and lift it out. Note the receiving holes in the bottom of the PSU and the hooks on the base of the A4000 - you can't just pull it out, you have to slide it forwards until it comes free, then lift it.

The screws holding the motherboard to the case should now be removed, and after unscrewing the nuts that hold the ports in place at the back of the A4000 with the driver included (see inset), you can remove the

> **"...you could probably fit a small, supple pygmy into one without too much fuss..."**
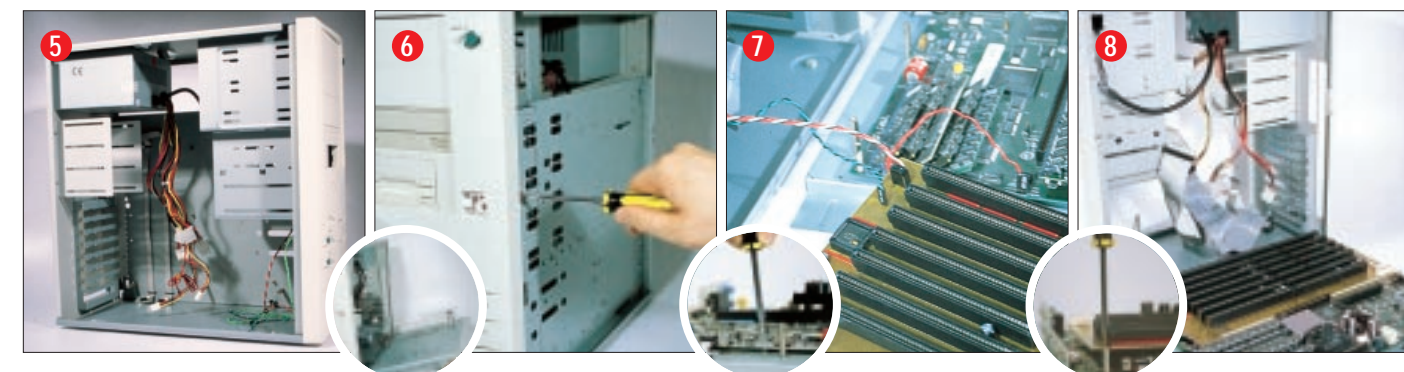
motherboard completely. Now you're ready to re-install everything (bar the Zorro riser and PSU) into the Power Tower.

In with the new
5) After opening the Tower (you need to undo the four screws at the rear first) and admiring all the room inside, install any hard and floppy drives so that they only need to be connected up to the PSU and motherboard once you've finished installing everything else.
6) Undoing another two screws enables the vertically-mounted metal plate on the side of the Power Tower to fold down, making installation of the motherboard as easy as screwing it back into the original casing.
7) Screw the motherboard onto the folded-down metal chassis in the same way it came out of the A4000. The mouse and joystick ports, once the chassis is folded back into place, will point to the bottom of the Tower and can be plugged into the extension leads attached to the inside of the unit.

Attach the lead from the disk LED on the front of the Power Tower to the motherboard, and the reset lead to the Zorro board.
8) Plug in the Zorro extender and screw it down to the metal pillars on the chassis.

These pillars help to support the Zorro board during the installation of Zorro cards.
**9)** Connect the large power connector from the PSU to the motherboard (it will only fit on the right around). Connect the Zorro board's power lead and fold up the metal chassis, securing it once again by replacing the two screws you removed in step 6.
10) Re-install your Zorro cards. You may find a problem if anything on them (such as a hard drive on a SCSI card) needs powering from the PSU, as the leads don't stretch far - you may need to invest in a power extender or remount a drive in a spare bay.
11) Connect all your drives to the motherboard and power supply. There! Stand back and admire your creation - there's still plenty of room in that case, so you may not have to evict your pygmy friend before you've installed a few more Zorro cards, hard drives or removable media drives - whatever you like, because you've got the space (and the power) now!
12) Finally, close up the tower, securing the cover with the four screws at the rear that you removed earlier. Refit the A4000's ports with the nuts you removed from the back of the original A4000 and garnish with little stickers (provided) to identify which port is which. Voila!

Risky Business?
The Power Tower manual jokes about having a cup of tea to hand when re-installing your A4000 - not the greatest idea since hot water is an excellent conductor of electricity. We recommend that you get your cuppa out of the way before you go anywhere near electrical equipment.

The one thing you must remember when carrying out anything like this is to take your time. A slip of the screwdriver when securing the motherboard could prove costly - remember the old adage, "more haste, less speed."

Finally, remember that we cannot be held responsible for any damage or ill effects which may result from following (or more likely failing to follow!) our guide. Please take care!
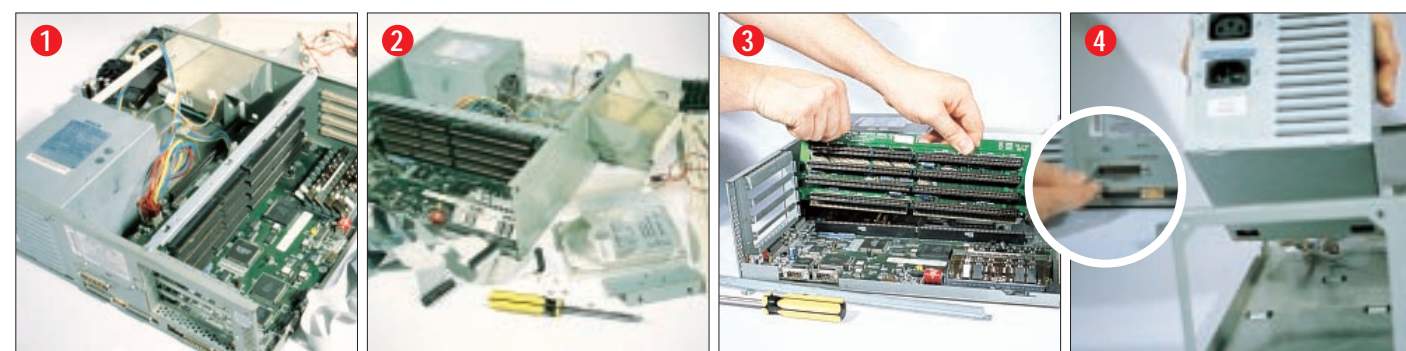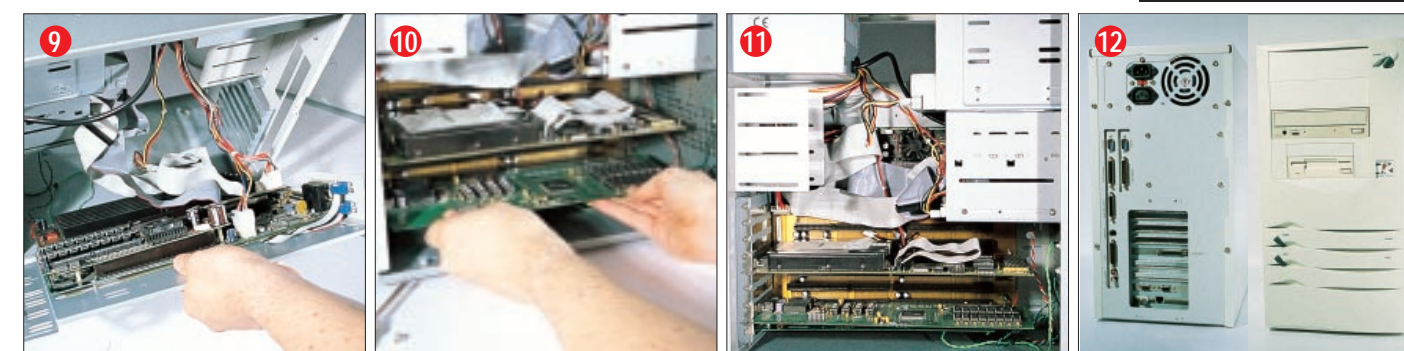
The Verdict
So what do we make of the A4000 Power Tower? It's roomy, that's for sure. Installation really is a doddle if you follow the instructions and use your common sense (the booklet recommends installing the Zorro board after closing up the chassis, but we found it easier to do this whilst the motherboard was still horizontal). The finished article is better underneath a desk and gives you much more room for expansion with seven internal drive bays (four 3.5", three 5.25") and seven Zorro slots - allowing for far greater expansion in the Zorro card area than there is in a desktop A4000 case - and that's the main reason for buying one of these units.

We like the Power Tower A4000 so much we're going to keep it - it doesn't overheat the way the cramped desktop used to, with plenty of room for air to circulate. These reasons, combined with the Power Tower's ease of installation make it well worth the asking price if you intend to expand your A4000.

POWER TOWER A4000 **8/10**

SUMMARY: Give your A4000 plenty of room to breathe and stretch its cables, not to mention greater expanson potential. It'll love you for it, as will Power.

REBOL
with a cause?

Carl Sassenrath is yelling the cause with his new programming language, REBOL.

Does anybody really need yet another new language? Wasn't Java meant to be the last word in platform-independent programming? Not so, says Carl Sassenrath, father of the Amiga's multi-tasking operating system. Being a rebel, he reckons we should all be pronouncing words a bit funny and using his new programming language.

REBOL is, as you might have expected, an acronym. Apparently, it stands for Relative Expression-Based Object Language, and it should sound the same as "rebel" (useful to know should you ever get around to mentioning it polite dinner-table conversation.

The advertising says it's a "context-sensitive Internet messaging language." What this means in reality is that it's pretty powerful, high-level and simple to use. If you ever fiddle around with e-mail, web pages and other internet related things, then you might well find it handy.

A big plus point is that it's pretty much platform independent, with versions running on all "major" operating systems, including (of course) AmigaOS. This means that all your Windows- and Linux-loving friends can enjoy being REBOLs, too.

What's it good for?
When it comes down to it, there are probably two main reasons for using REBOL. Number one is the integration of the significant Internet protocols and the simplicity with which you can manipulate files, web pages, e-mail, news, etcetera.

The second reason lies with the astonishingly powerful "parse" function, which enables you to extract useful information from reams of text or reformat it. Coupled with the first reason for using this language it soon becomes clear that harvesting all that important knowledge you need from the 'net using REBOL can soon replace a time-consuming and tedious trawl round your usual pages with a quick and handy little summary to read over your morning cup of coffee.

What else?
REBOL can do many more powerful things. Some small modifications to the last example (see below) would enable you to extract hypertext links and generate an HTML file of the headlines (so you could zip off to the full article if the headline was interesting just by clicking on it when you're online). You could even sort stories into "UK" and "World" headlines by analysing the link. You might also extract any news snippet that goes along with the headline. The possibilites are, when all's said and done, limited only by your own imagination.

It would be easy to summarize information from a variety of sites in the same file, but rather than writing files it's just as easy to e-mail the summaries to your friends with a simple "send" command. Better still, you could upload an HTML version to your web site by writing directly to an FTP URL.

Some more of REBOL's high-level commands would allow you to check whether a site has been modified since the last time you visited it. You could do this by checking the timestamp on the URL (using the "info?" command), or more effectively by checksumming the data that you extract (using "checksum") and remembering this value for comparison next time (using "save" and "load"). You can even save local copies of the web pages you analyse so you don't need to keep visiting the web while you're creating or updating your scripts.

Limitless possibilities?
In fact, there's not much that involves the Internet that REBOL can't do. Even some things that aren't immediately obvious can be done with just a few lines of code. Examples of this are e-mail attachments (achieved by MIME encoding the data and making the right headers) and form submission (by writing information directly to the web port).

The REBOL web site at http://www.rebol.com contains numerous examples ranging from a simple web server (about 20 lines of code!) to a CGI form handler. There's even a directory for user contributions which contains even more scripts for all sorts of operations - from encoding words based on their sounds to encryption routines.

REBOL is still maturing, with extensions such as an XML parser pencilled in for the next version. Even at the moment, it's an extremely useful language for people who use the Internet a lot. It's certainly not (yet) the tool for creating an application with a fancy GUI, but it is very powerful, applicable and - best of all - simple to use.

Jason Compton A

Above: The news round-up page at www.ukgamer.co.uk, powered by one of Jason's REBOL scripts. Sometimes.

Example!

A pretty common web page that ought to be on your morning's tour of web sites is the BBC's daily serving of news located at http://news.bbc.co.uk. You may prefer to get just the headlines from such a page to see if there was anything worth looking at in more detail.

You shouldn't be surprised that this little problem is pretty easy to solve using REBOL to pull back the web page, analyse it and dump out the interesting bits of information. The difficult part of this job is spotting the pattern in the HTML so that the data can be extracted by a script.

Luckily, web pages like this are extremely likely to have such a pattern because they are generated by wrapping appropriate HTML around new text and pictures each day.

OK, so let's see something
In its simplest usage, "parse" splits a string at certain characters. Example one shows how this can be used to chop up a string at spaces. (">>" is REBOL's command prompt, with the command immediately following it. The next line (beginning with "==") is the result. Lists of values are enclosed in square brackets ("[" and "]"). The result is a list of strings).

Just one step more complicated gives us something pretty useful. Take your average web page: it has a lot of text on it. It also has a lot of stuff that isn't really text - HTML code which structures and formats the information.

In simple terms, the special bits of a web page are the HTML tags, which begin with "<" and end with ">". To extract the useful information in a page you just need to remove the tags. Okay, so strictly speaking this isn't completely true, but it's enough to understand for this example).

Example two shows how easy it is to do the necessary parsing, using "parse" to split the text at "<" or ">". The "/all" qualification to "parse" is called a "refinement" - it's like passing options to a command. This option tells "parse" to include the white space in the result strings, and not to start another line when it encounters a space.

As you can see, the useful information is every other item in the resulting list, starting with the first item. The other strings in the list are the tags (i.e. the bit of text between "<" and ">").

Example three finishes this off, saving the result of the "parse" as "rlist" and then printing every other item.

Parse patterns
Another use of "parse" is to match text against a pattern. This is where the real power lies. Example 4 shows how to extract the bit of text that's in bold in the example HTML. The pattern is given by the list, and this example says "if the text starts with a <B> tag, copy the bit of text up to the </B> into the variable x, then print it".

You can give a choice of patterns to match by separating them with "|". You can specify that the same pattern (or choice) be matched many times. There's probably too much to explain here, but the example four shows how you might use pattern matching to achieve the task of extracting the headlines from the BBC news page.

Headlines
Example five shows how easy it is to read a web page (stored in the "text" variable) and write to a file ("digest.txt"). The interesting bits of the page's content are described by the "line" pattern, i.e., the stuff between the "<TD>" and "</TD>" tags. If the text that follows some new-lines and font specifications is a hypertext link (an "<A ..>" tag) then it's a headline, unless it's an image or some parameters.

The grunge work is done by the "parse", which ignores all the HTML up to the special comment ("...Todays date...") then matches some interesting lines, new-lines or skips up to the next "<TR>" tag or the end of the HTML. The results of this will be found in the "digest.txt" file. Of course, this is rather fragile: if the BBC changes the layout of their news page significantly, then this code won't necessarily work anymore. Luckily, that's not likely to happen very frequently.

```
5
out: %digest.txt
write out ""
text: read http://news.bbc.co.uk/
line: ["<TD" thru ">" any [newline
       | "<FONT" thru ">" | <B>]
       ["<A" thru {">} any newline
       [ "<IMG" | "<PARAM"
       | any "<B>" copy item to "</"
       (write/append out rejoin
       [item "^/"])]| none]thru </TD>]
parse text
       [thru <!—******** "Todays date"
       component ******** —>
       some [line | newline | thru <TR>
       | thru </HTML>]
       ]
```

```
1
>> parse "REBOL is a lot of fun" " "
== ["REBOL" "is" "a" "lot" "of" "fun"]
```

```
2
>> parse/all "<B>REBOL</B> is a <I>lot</I> of fun" "<>"
== ["" "B" "REBOL" "/B" " is a " "I" "lot" "/I" " of fun"]
```

```
3
>> rlist: parse/all "<B>REBOL</B>is a <I>lot</I> of fun" "<>"
>> forskip rlist 2 [prin first rlist] print ""
REBOL is a lot of fun
```

```
4
>> parse "<B>Fun</B> is REBOL's <I>middle</I> name!"
   ["<B>" copy x to "</B>" (print x)]
Fun
```

STFax 4

The multi-talented STFax reaches version 4

Probably the worst feature of STFax is its name. Calling this a fax program is like calling ImageFX a paint package. In addition to an impressive range of fax facilities, STFax provides telephone, voicemail and BBS facilities.

The fax software provides all the facilities you would find in a dedicated fax machine, and a few more besides. There are several ways to send a fax, the easiest being the fax printer driver. This directs the output of any program to STFax. You compose a letter in your favourite word processor, complete with graphics and letterhead, and the "printed" document is saved as a fax. STFax then opens the Send Fax window where you specify the recipient of the fax. After typing in the fax number, or selecting the recipient from the phone book, you can send the fax immediately or schedule it for transmission later.

Faxes can also be created within STFax. A quick note can be typed into the Notes area of the Send Fax window. More complex documents are handled as attachments. Each attachment is converted to a fax before sending. You can attach text files, images and other STFax files. As with faxes generated by the printer driver, these faxes can be scheduled or sent to multiple recipients. In addition to sending a fax immediately or scheduling it, STFax has an option to store faxes. These can be sent later, or used as attachments in other

Below: The main STFax window, showing a list of faxes.

faxes. They are also used for the faxback system, covered later.

Faxes produced by STFax are of a significantly higher quality than those sent by a standard fax machine, as they are generated from the original data rather than a low grade scan. This is fine if you want a fax a document already in your computer; you'll need access to a scanner to fax documents that only exist on paper. Normally you do this by printing from your scanner software to the STFax printer driver, but life is easier if you have ScanQuix. The Scan button in the Fax Send window uses ScanQuix to scan and import documents, taking away the last advantage of a standard fax machine. You can also forward a previously received fax to another number.

Voicemail

Voicemail can be used for anything from a simple "Hi, I'm not here, leave a message after the tone" answering machine to a sophisticated system involving multiple menus and even different actions based on the calling number. STFax uses a simple yet powerful scripting system - you add commands to the scripts simply by clicking buttons on the GUI - there's no programming skills required.

The most basic script consists of a single "Record Msg" command. This will play a recorded greeting and record the caller's response, just like a normal answering machine. Each recorded message is marked with the date and time, along with the caller's number and name if available.

Creating a complex voicemail system with multiple menus is fairly easy. The hardest part is planning the options and writing the messages. STFax will record messages thorough the modem's microphone (if available) or through the telephone handset. It can also import sampled files in any format that your datatypes can handle, although you may need to convert them to mono first. STFax4 comes with a selection of professionally recorded messages, in English and German. There are nearly 25MB of messages in wave format on the CD. The

Creating a good voicemail script

Planning is the key to a successful voicemail system. No caller wants to have to navigate through four or five levels of menus, or listen to lengthy messages. Work out what you want to offer and plan the most concise yet understandable route through those options. Keep your messages short, and use consistent terminology. Sketch out a flow chart before you start creating the script, it will save time later.
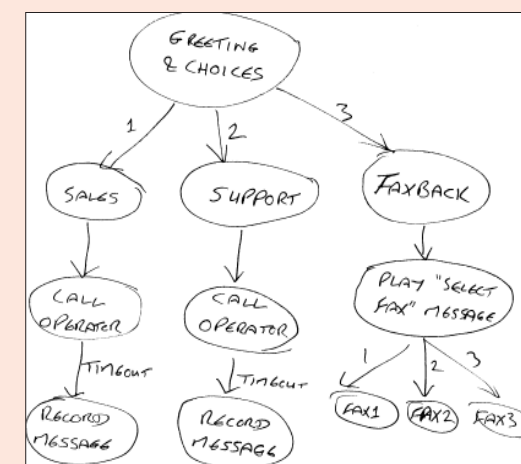
"You can record custom messages for individuals"

documentation contains tutorials and a command reference page, but there are only two very basic example scripts.

While the scripting system is fairly easy to get to grips with, a wider selection of example scripts showing how to use the remote access, faxback and other features would be useful.

Advanced features

Faxback is a way to make information available to customers for minimum effort and zero cost to yourself. This would normally be part of a script that asks the caller to choose from a list of options. Choosing one of the faxback options results in the selected document being sent to the fax machine they are calling from.

If you have caller ID on your phone line, STFax allows you to filter calls according to the calling number. You can record custom messages messages for individuals, either for a personal touch or because you have a message to give to that person. You can also blacklist numbers. Most telesales companies have their caller ID withheld. Setting a filter that plays a message saying "we do not accept anonymous calls" and hangs up is a good way to avoid being bothered. Any genuine caller can re-enable caller ID and call you back (in the UK you prefix the number with 1470 to do this).

BT introduced a "Distinctive Ring" service recently. This gives you two numbers on the same line, each one giving a different ring tone. It's ideal for people working from home since they can give out a separate number for work contacts and choose to ignore calls on that number out of working hours. STFax takes this a step further; it recognises the different ring tones and can be configured to react differently. You could set it to answer the work number and let calls to the home number through in the evening, vice versa during the day, or use one number for voice and another for fax.

STFax supports Independent Operation

modems, such as the Pace Solo. These modems can receive and store messages and faxes when the computer is switched off. STFax will download any new messages or faxes when it starts up, and then work in its normal mode, handling calls instead of the modem. When you quit STFax, it will switch the modem back to independent mode.

As with many answering machines, STFax doesn't make you wait until you return home to listen to your messages. Call your own number and press the # key while the greeting message is playing and you will be prompted for your user ID and password. You then have the choice of reviewing your voice messages or faxes. Voice messages are played over the phone; fax messages can be forwarded to any number you specify. If the range of options isn't enough for you, STFax has an ARexx port, and most of the scripting options can launch ARexx scripts. For example, I have a script to forward received faxes as email attachments when I'm away and don't have access to a fax machine

Who would use STFax

Almost anyone with an Amiga and a modem would benefit from this program, although you do need to leave your Amiga switched on all the time if you don't have an independent mode modem. For about the same price as a basic answering machine, you not only get a full-featured answering machine, but also a fax and voicemail service. It really comes into its own for anyone working from home - I would have killed for something like this when I worked as a field sales manager, just for the ability to screen out work calls at night. For the SOHO (Small Office Home Office) user, STFax could be considered an essential addition. Combined with some of BT's services, it allows even the smallest business to present a thoroughly professional appearance, which is never a bad thing.
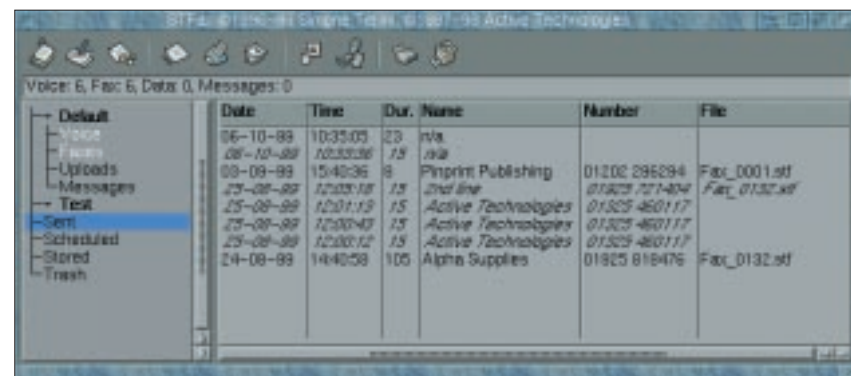
Neil Bothwick A

BBS

STFax also includes a BBS system. This was introduced in STFax 3 but didn't work very well. There were problems distinguishing an incoming data call from a fax call. This has been fixed in STFax 4 and it now works well.

Why would you want a BBS in these days of Internet access for all? One potential use is transferring files from a computer at work to your Amiga at home. Uploading these to web space or sending as email is cumbersome for large files, and expensive for you to download when you get home. Uploading direct to your Amiga at home means there's no phone costs incurred on your home bill. Another use is for a business wishing to make updates available to customers in password protected directories.

STFax 4 **9**/10

SUMMARY: Good fax software, even better voicemail software. Very easy to set up for a basic system, advanced features are ideal for business use. It comes with an ARexx port for customisation, but the docs could be clearer.

Teaching an old dog
New Flicks

Dim the lights for this month's feature presentation, a look at movie players for the small screen.

Not long ago, MPG stood solely for "Miles Per Gallon," and whilst you may not get a lot of those today, you will find a lot of MPG files on the Internet. What's going on there then? Petrol companies piping fuel down your phone line? Actually it stands for Motion Picture experts Group, and is a file format for movie clips. With .MPG, .AVI, .QT and .MOV files now available all over the web, you could be forgiven for thinking the world has finally gone acronym crazy, but AA (sorry, "*Amiga Active*") is here to explain.

Go to any movie site and chances are you'll find a trailer available to download and play on your computer. Rather than go to the cinema to see upcoming film trailers, you can sit at your computer screen, go online and download them to watch in the comfort of your own home.

Movie trailers aren't the only use for such file formats - animations elsewhere on the Internet use them too - just do a search for ".mpg," ".avi," ".qt" or ".mov" on any of the major search engines and see what's available. Then, once you've spent all weekend online filling your hard drive with files you'll want to view them. How do you do that on an Amiga? Over the last few months there's been something of a flood of Amiga video playing utilities - so here is a roundup of the better options.

SoftCinema
Despite being an early version and having to be run from the Command Line Interface (CLI), SoftCinema shows plenty of promise and doesn't confound you with a wealth of baffling command-line options. Supported formats (QT, MOV and AVI) can be played full-screen (but only in AGA modes at the moment) or in a window on Workbench. It isn't blazingly fast (despite running on PowerPC), but this is only the beginning of what promises to be an excellent movie player. Support for some Intel codecs requires the downloading of a few extra modules which are stored in a "codecs" subdirectory - nice and simple!

SoftCinema 0.5 beta — avi qt mov

REQUIRES:	PowerUp (ppc.library v46+) or ppc.lib emulation for WarpOS, AGA or graphics card with CybergraphX 3+, 8MB RAM, OS 3.0+, AHI v4 for sound.
TYPE:	Shareware. $15 registration fee or equivalent.
FROM:	Aminet: gfx/show/SoftCinema.lha (223k)
	External Intel codec archives available from: http://xanim.resnet.gatech.edu/linuxELFppc.html

IsisPPC
Isis is a player just for MPEG animations. Like SoftCinema it runs on a PowerPC, but it hasn't been updated since v2.12 (released just under a year ago). Although prone to the occasional unpredictable lockup, Isis is a very capable MPEG player for PowerPC equipped Amigas.

Isis can be run from CLI or the Workbench via an unobtrusive control panel (pictured). Isis eliminates the need to go near a shell window, providing hassle-free set-up and playback. Providing extra features for owners of a CyberVision64/3D graphics card (video overlay for improved playback speed and mapping an MPEG stream onto a rotating cube, should you require such a feature to impress your mates), IsisPPC is well worth the download time despite the fact it's starting to look a little dated.

IsisPPC 2.12 — mpg

REQUIRES:	PowerUp (ppc.library v45+), CybergraphX 2+, 4MB RAM, OS 2.0+, AHI v4 for sound.
TYPE:	Freeware.
FROM:	Aminet: biz/p5/IsisPPC-2_12.lha (337k)

"Sadly, 68k efforts just don't cut the mustard unless you have an '060 - the PPC will always win out on brute strength, a lot of which is required..."

CyberAVI
As its name would suggest, CyberAVI's primary intention is the viewing of AVI animations. Usable from either the CLI or Workbench (with options specified via icon tooltypes), CyberAVI works on 68k processors only - no PowerPC support here - but it's no slouch. Obviously an '060 will give you the best results, but output of smaller animations is more than adequate on an '040/25.

Despite CyberAVI's 'To Do' list including a better audio system and support for more video encodings, CyberAVI hasn't been updated for a while. Nevertheless, it's still a good little utility for those without a PowerPC card.

CyberAVI 1.12 — avi

|	
REQUIRES:	68020, AGA or graphics card with CybergraphX 2.21+, 2MB FAST & 512k CHIP RAM, OS 3.0+.
TYPE:	Freeware.
FROM:	Aminet: gfx/show/CyberAVI.lha (289k)

CyberQT
What has been said for CyberAVI in terms of speed and usage can also be levelled squarely at CyberQT, which plays .QT and .MOV files. It's a shame that trying to play the Star Wars Episode One trailer on an '040/25 with this utility almost made me cry - I'm sure it's a well-coded player, but an '040/25 trying to show a 25MB AVI at full speed in a Workbench window under CybergraphX 4.1 just isn't a happy sight - 7.75 FPS (should have been nearly 15) and out-of-sync audio bursts with stuttering video isn't what you'd call watchable. Even making use of all CyberQT's options (pre-loading the audio, viewing it in postage stamp sized black and white and so on) didn't help it to reach satisfying speeds. Great utility, shame about the hardware - but that's not author Thore Bockelmann's fault.

CyberQT 1.4 — qt mov

REQUIRES:	68020, AGA or graphics card with CybergraphX 2.21+, 2MB FAST & 512k CHIP RAM, OS 3.0+.
TYPE:	Freeware.
FROM:	Aminet: gfx/show/CyberQT.lha (300k)
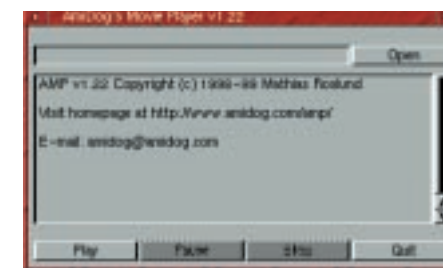
AMP
Mathias "Amidog" Roslund's AMP is perhaps the biggest, best and most rounded player available on the Amiga today. Yes, it requires WarpUp (Haage & Partner's PowerPC kernel, freely available from www.haage-partner.com), but then any animation player worth its salt should be using PowerPC today rather than struggling to get the most from the dated 68k line of processors.

Controversy aside, how does AMP shape up? Using it is a breeze. You have to start it from the Command Line (give it a large stack, then launch the GUI by typing "AMP -gui" - couldn't be much simpler) but once started, all the options can be set via menus and saved.

Although still a little buggy, AMP shows great potential. It's not bothered about any of that 68k nonsense, going straight for the jugular with PowerPC. Once Mathias has stomped on a few bugs and added the option to play movies on the Workbench screen (currently it chooses a separate screen from a configurable list or pops up a screenmode requester), AMP could quite easily become my player of choice.

AMP 1.22 — mpg avi qt mu/fla

REQUIRES:	PowerPC, WarpUP 4.0+, CybergraphX 3+, 16MB RAM, OS 3.0+.
TYPE:	Shareware. £10 registration fee. Unregistered version will only play MPEG clips.
FROM:	Aminet: gfx/show/AMP.lha (250k)

Conclusion
All movie players benefit from more RAM, a faster graphics system and a nippier processor. Sadly, 68k efforts just don't cut the mustard unless you have an '060 - the PPC will always win out on brute strength, a lot of which is required in this field. It may take a little time and a G4 accelerator before it becomes really good. Until then, I'm off down the cinema to see these things as they were originally intended - on a big screen with surround sound, a bucket of popcorn and an overpriced fizzy drink.

David Stroud A

Graphics Cards

Part two: The 3rd Dimension

These days, graphics cards are about more than bigger screen resolutions.

Mention the Amiga in the same breath as ground breaking 3D graphics and people will laugh. Indeed, the nearest the Amiga has come to a decent 3D graphics game in recent years was a welcome yet belated conversion of Quake, but mention the fact that it ran on 68k Amigas without 3D hardware acceleration and again, people will laugh. Telling them you had to pay good money for the privilege probably won't do you any favours either.

There's no reason to give up hope just yet - 3D games are at last approaching the Amiga in the form of Maim & Mangle and Explorer2260 from The World Foundry, Shogo and HereticII from Hyperion Software, and Wipeout2097 (previewed this issue, on page50) and a number of others. So far so good, but let's not forget that Amiga 3D games are going to be useless without decent Amiga 3D hardware; in which case, where is it and is it any good?

If you have a CVisionPPC or BVisionPPC graphics card from Phase 5 you may think you're well prepared for any 3D software which may pop up on the Amiga in the near future. To a certain extent you will be, but these cards use Permedia2 graphics chip from 3Dlabs - hardware that has long since been superseded. 3D graphic card is the fastest moving sector in computer technology right now.

Waiting for a bus
One problem concerning current implementations of Amiga 3D graphics is the bus speed of current hardware. In layman's terms, bus speed limits the transfer of data between the computer and the graphics hardware. Texture intensive applications, which have to shovel large amounts of data backwards and forwards, are hit hardest. While texture compression routines as offered on the latest 3D hardware would help overcome

Below: Spot the difference - Descent, running in hardware and software. As well as giving a higher quality image, hardware rendering is a lot faster, allowing higher resolutions and greater speeds!

this problem, there's no getting away from the fact that a slow bus is a major drag factor in all areas of 3D graphics.

G3 and G4 boards currently in development for the Amiga by a number of companies should address this issue and provide a much faster bus system, but at the same time will highlight the other major bottleneck concerning 3D graphics on the Amiga: availability. While we await the Voodoo add-on modules for the PicassoIV and Pixel64 cards, only the Phase 5 graphics boards currently offer any form of 3D hardware acceleration.

Next in the pipeline from Phase 5 are the G4 accelerators which will pair up with their 'next generation' graphics card. The CVPPCNG will offer 32MB of on-board memory in the form of industry standard SDRAM and the (as yet unnamed) 3D graphics chipset will offer full-screen, full-frame DVD playback, a 128-bit 3D pipeline and a maximum resolution of 1920x1200 in 32-bit at a refresh rate of 72Hz. It should compare reasonably with to similar specification PC graphics cards on price, too. It may not be the very top of the tree, but things are finally looking up for Amiga 3D graphics.

Playing Catch-up
Will the CVPPCNG and the Voodoo add-on module for the dated PicassoIV be enough to pull the Amiga back from the brink of 3D obscurity? The problem is twofold - not only are there too few 3D graphics cards available for the Amiga, there's not much of a market left for them either. The burning question remains: How many Amiga users will want a G4 accelerator and 3D graphics card? It's a sobering thought, but as Thomas Frieden of Hyperion Software points out, the Amiga still has life left in it, should the various hardware manufacturers play their cards right::

"Upcoming G3/4 hardware in conjunction with a modern accelerator like the RivaTNT2 or a Savage 4 would give the 3D programmer a tremendous boost of power. The best possible case would be if there were PCI, or even better, AGP bus systems available for the Amiga - preferably with the G3/4 boards, as these are able to really use the newer 3D hardware. This would allow us to use cheaper PC boards. There is a future. But it all depends on the current hardware manufacturers."

Above: Glaze3D from BitBoys Oy - on an Amiga near you soon?

Hardware manufacturers, meanwhile, rely on software authors to produce stunning software - hopefully the so-called "killer application" - which will sell their hardware. The question remains: will we be tempted by cutting-edge software which will make use of the new G4 accelerators and 'next generation' Amiga 3D graphics cards, or will the extent of Amiga 3D software be limited to a handful of demos and a sprinkling of graphics software, datatypes and plug-ins? Not if Hyperion Software, Digital Images, The World Foundry and other software (not just games) developers have anything to do with it. For the first time in many years, software which uses Warp3D will be in the position to push Amiga users to upgrade their systems. This is mainly thanks to that unique feature of 3D graphics: the never-ending quest for bigger resolutions and greater speed. If you were playing Wipeout2097 on your Amiga, would you settle for 25 frames per second at a resolution of 640x480 in 8-bit if you could achieve 50 FPS in 1920x1200 at 24-bit just by adding a better graphics card to your Amiga?

3D hits Warp speed
That titles currently in development will take advantage of future 3D hardware as soon as it becomes available may be the saving grace of Amiga 3D software. Thanks mainly to Warp3D - a constantly evolving 3D Application Programmers' Interface (API) freely available from Haage &

Partner - you needn't worry about future 3D hardware being incompatible with current software. Instead, boosting both resolution and speed will be as easy as plugging in a new 3D card and installing the latest driver.

So, we aren't just playing catch-up to the current standard in 3D graphics on other platforms, only to be left behind six months down the line when 3D hardware takes another step forward. Not only could the Amiga soon reach the dizzying heights of G4 processors and Voodoo4 or Permedia3 graphics chips, but once it does, keeping apace with future developments in the fast-moving world of 3D graphics will be a reality. Software developers want the chance - now it's up to the hardware manufacturers to offer it to them.
David Stroud **A**

3D solutions

Board	Fits	Price	Test1	Test2
Cybervision 64/3D	Zorro3	£164.95	16.9 FPS	4 FPS
CyberVision/ BlizzardVisionPPC	Phase 5 PPC card	£149/ £139 (rare)	37.1 FPS	24.5 FPS
VillageTronic Voodoo module	PicassoIV	£250	n/a	n/a
Ateo Voodoo	Zorro3 & AteoBus	TBA	n/a	n/a
CVPPCNG	Phase5 MiniPCI	TBA	n/a	n/a

*Test 1: Warp3D "engine" demo on '060/50 - 640x400x15, perspective correction and dynamic lighting.
*Test 2: Warp3D "engine" demo on '060/59 - 1024x768x15 with perspective correction, filtering and dynamic lighting enabled.
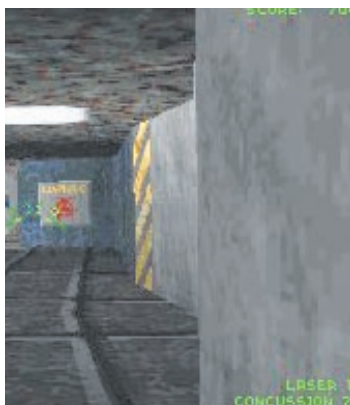
We expect the Voodoo 1 cards to provide approximately similar performance to the CVPPC - probably slightly faster but not capable of quite such high resolutions or 24bit colour. The CVPPCNG should be significantly faster.

Why Warp3D?

The main difference between Warp3D and other 3D APIs such as OpenGL is that it doesn't do any 3D calculations. This may sound like a contradiction, but it isn't. Rather than going through a sequence of 3D calculations for each element you need to draw on screen, you instead define everything in terms of co-ordinates and specifying the depth at each vertex. The upshot of this is that, for example, a Doom clone could be more efficiently coded using Warp3D than OpenGL because such an engine doesn't require a lot of complex 3D calculations.

On a more immediate level, Warp3D allows the programmer to write more generic code. Rather than worry about coding routines for individual 3D graphics chipsets, Warp3D provides a further level of abstraction, allowing programs to take advantage of all available 3D hardware, both present and future.

What of other 3D APIs? There aren't many. The current implementation of OpenGL is slow on anything but a fast PowerPC. Hyperion Software, however, are currently developing a cut-down version of OpenGL, dubbed "QuakeGL" as it only supports parts of OpenGL used by GLQuake on the PC. The only other 3D API to support 3D Amiga hardware is the CybergraphX RAVE library. Tornado3D (pictured) uses CybergraphX RAVE to provide accelerated 3D previews in its main window. Despite giving impressive results however, CGX RAVE doesn't support the Virge chip (as used on the CyberVision 64/3D graphics card) and, unlike Warp3D, isn't PowerPC native.

Below: Tornado3D from Eyelight uses CGXRAVE for accelerated 3D previews.
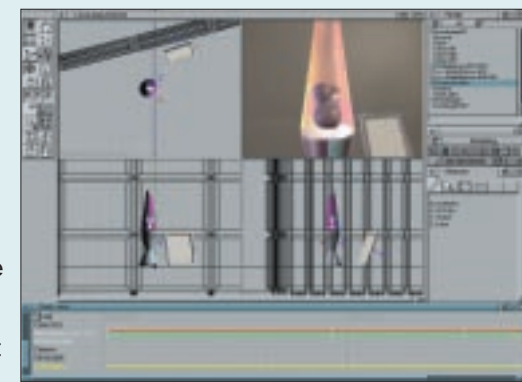
NAME: AMIRC 3.2
DEVELOPER: VAPOR SOFTWARE
SUPPLIER: EYETECH
TELEPHONE: +44 (0)1642 713185
COST: £20. Upgrade from 1.x/2.x - £10
WEBSITE: http://www.vapor.com

AmIRC 3.2
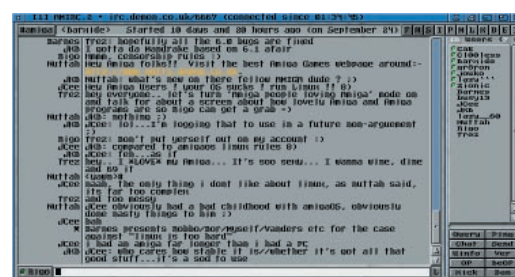
Above: Advocacy, love and hate on IRC.

Mention the Internet and many people's first thought is of browsing the Web. While it's a major contributor to Internet traffic, it's not the only service available. IRC (Internet Relay Chat) offers an open forum of discussion between users.

Of the few IRC programs available for the Amiga, Oliver Wagner's AmIRC has been hailed as the best IRC client on any platform, and this reviewer is inclined to agree.

For the first time user, AmIRC comes pre-configured with some default IRC servers and joining any of these is a simple matter of double clicking it's name in the MUI interface. Once logged in, you'll be able to join a channel; for instance Amiga specific channels such as #AmIRC and #Amiga.

AmIRC boasts bundles of features simply not found in other clients, or on other platforms. Its latest incarnation, V3.2, adds many bugfixes to 3.1 which introduced coloured text,

OpenURL support, an extensive Arexx interface, updated security and usability options and a completely reworked preferences section. Apart from needing your name and a nick to identify yourself, AmIRC will run perfectly happy on all the default settings making it ideal for new users.

Another handy IRC feature is the direct transfer of files between users, controlled by an extensive MIME section for setting up just about any type of transferred file. If you download an HTML file, for instance, it can

be set to automatically display it in your browser, or a text file could appear in 'More'. Again, Oliver Wagner has spent some time configuring most of the popular MIME types, although it may be necessary to change the defaults to suit you.
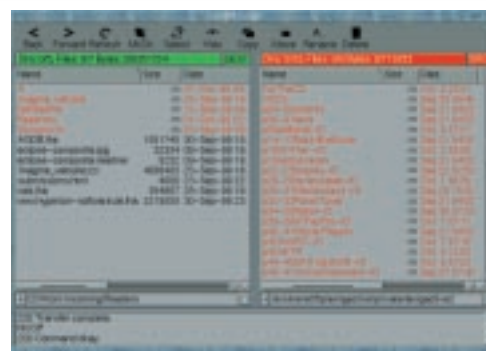
Simon Archer Ⓐ

AmIRC 3.2
SOUNDBITE: The king of IRC clients just keeps on getting better.

NAME: MFTP-II
DEVELOPER: VAPOR SOFTWARE
SUPPLIER: EYETECH
TELEPHONE: +44 (0)1642 713185
COST: £20. Cross-upgrade from AmFTP - £15
WEBSITE: http://www.vapor.com

mFTP-II

Above: Connected to a site, mFTP-II

After installing mFTP, you need to add some sites to the site list. There aren't any pre-configured, not even a few Aminet servers. This causes a slight problem as you have to add a site to the list before you can connect to it; there isn't an option to type a site name in to a gadget for a one-off connection.

mFTP-II has two very useful FTP features, batch

downloading and ADT. By dropping files from various sites onto the batch window, you build up a list of files to download. You choose whether this download starts immediately, or whether it waits until you press the start button. This is extremely useful if you want to download files from several sources. mFTP-II is fully multi-threaded, so you can open more than one site and drop files from each one onto the Batch window. ADT (Aminet Download Tool) is a special way of

connecting to an Aminet server. The first time you use it you will get a list of files uploaded in the last seven or fourteen days. The next time, you only see those files downloaded since the last time you connected.

The current version of mFTP-II is a bit hit and miss. It has some good features, especially its BatchFTP, but it is somewhat unstable. It is also missing the ability to copy complete directories or set protection bits on CGI scripts, essential features

for web site maintenance. With a few bug fixes and a couple of extra features it would be a powerful online tool well worth recommending to anyone, but not as it stands at the moment.

Neil Bothwick Ⓐ

mFTP-II
SOUNDBITE: Works well, but missing some vital features for web site maintenance.

Active Shareware

Join us for another look through the month's tastiest shareware offerings - some essential utilities and tools you shouldn't be without.

With an ever increasing number of Amiga users working with alternative systems for productivity, wouldn't it be nice to be able to bring some of that work back to the Amiga?

Wordconverter from Peter Drapich offers the ability to convert files created with Microsoft's Word to files readable on your Amiga. Currently, this shareware offering supports both WIntel and Macintosh versions of Word, not to mention revisions going back to 2.0 for Windows and as late as Word 2000. You can also specify how you want the text output formatted, including plain ASCII, Amigaguide, HTML and RTF. Operation is simple, using a plain but functional Gadtools interface, and context help is available at the bottom of the window.
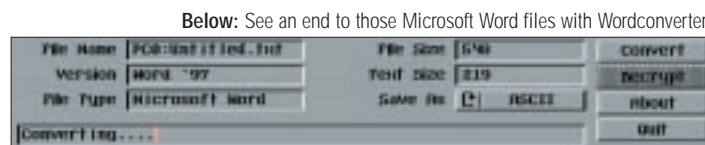
Wordconverter is an ideal little utility for the user that needs to share common files with other platforms. Also supplied in the archive are some additional ARexx scripts that will allow you

to use Wordconverter and import the output files straight into PageStream or CygnusEd, and full command line parsing so you can use it to batch process files too. At the measly sum of £10 Sterling, it's a worthwhile investment if you have a few Word documents around that you'd rather see on your Amiga.

SimpleFTP
The Amiga has a number of quality FTP clients, and most of these are fighting to keep ahead of the competition by including more and more features that casual users never need or want. Rick Hodger's SimpleFTP has taken the opposite approach, and so should appeal to users who just want to download something quickly and easily without all the fuss of ADT servers and the like.

SimpleFTP is, like most Internet software these days, based around the MUI Toolkit, and is very clearly laid out. The first section is the Site Manager where you can store all your

favourite places to visit along with their corresponding directories. Selecting one from the list and clicking on 'Connect' takes you onto the second section, which is where the actual site navigation and file transfer happens. All the usual functions are there, and you can use MUI's built in drag'n'drop to transfer files with a flick of the mouse. A complete log of the current FTP session is viewable in the third portion of the window.

The facility to utilise Proxy and Socks servers is a good one should you find yourself in a situation where you require this, and is activated via some tooltypes to set up the IP addresses and ports. SimpleFTP is a very good idea for users who just want an easy solution, but at version 1.4 there are still some bugs and quirks to iron out, and it crashes frequently. Luckily, the executable contains a debugger so it doesn't bring down the whole system. Some more work put in to solving these niggles would make SimpleFTP a much better application.

Newscoaster
One of the Amiga's virtues is freedom of choice - at least where shareware is concerned. Mark Harman obviously wasn't happy with the choice of news readers and so chose to write his own: NewsCoaster. While only at Version 1.1, NewsCoaster boasts

some good features enclosed in a simple to use and well laid out MUI interface. Newsgroups are public forums available to anyone connected to the Internet, and they cover just about any topic you could imagine. Due to the amount of traffic in the more popular groups like comp.sys.amiga.misc, messages are deleted a few days after. If you haven't collected any postings in a group for a week, you will lose some, but this makes it quite convenient when holidaying or taking some time away from your computer. Most newsgroups contain a certain amount of off topic messages and other unwanted mails; the more worthy information can take some finding, but is worth sifting through for.

You will need to enter some details into NewsCoaster in order to get it to work, but this is all quite straightforward, most important is the news server name itself. You also get options to configure the reading and writing of messages, and also a MIME section for decoding any attachments you may receive.

Most newsgroup readers will allow you to just download the message headers, which describe who the message is from and its subject; you can then opt to download the actual message itself. This can save a lot of online time, especially in the larger groups - and although

Below: See an end to those Microsoft Word files with Wordconverter

**Above:** SimpleFTP's "Site Manager" window makes configuration an absolute doddle.

One to watch: Pure Basic

Users of Blitz Basic may have become somewhat disturbed at the sometimes oversized executables and the frequent bugs. Based very closely on Blitz is Frederic Laboureur's PureBasic. Currently in early stages of development, it is apparently shaping up to be nothing less than "what Blitz should have been."

The syntax is almost identical, and a lot of the commands have the same functions and names as their Blitz counterparts. The compiler is, unlike Blitz

Basic, a standalone executable, which is used from the command line. This has the advantage of being plugged into any text editor you choose. Compiling source code at a rate of up to 30,000 lines per minute, and optimising for any 680x0 or PPC processor, it produces very compact and tight code, something that should be very welcome to Blitz users.

Included in the demo version are some example sources, the compiler, a debugger and some documentation to help get you started.
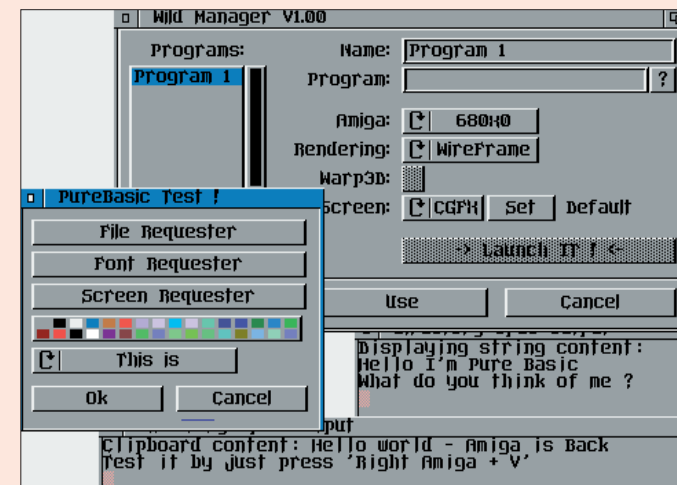
"...this makes it difficult to follow any one topic of conversation."

Newscoaster doesn't seem to offer this facility, but it will download as many messages as you like at any one time.

Another handy feature found in most e-mail and news readers is message threading. When the messages in a group are downloaded, they appear in the order in which they came from the server. Numerous conversations can be going on at the same time and this makes it difficult to follow any one topic of conversation. Threading follows the messages in the right order so that you can read the start of

the thread through to the end, which makes much more sense. NewsCoaster doesn't seem to do this, but does offer an alternative. The list of messages in any group can be sorted, and you can define how you want the sort to proceed. The most useful is to sort on message subject, as this will organise the messages in order so that the subject can be followed throughout the thread.

Also included is a newsgroup manager that will download a list of all the groups carried on a particular server. You can choose from this list which groups you

want to participate in, and join that group with a simple button press. The groups that you join are listed on the left side of the main window and reading postings is achieved by a double click on the group name. The message subject is displayed on the right side and again double clicking any message allows you to read it. The viewer window gives you the option to delete this message, reply to it and move to the next, to mention just some of the options. The editing of new or follow-up messages is done via the texteditor.mcc MUI

custom class, but according to the author this will be configurable in future versions, including launching an external editor of your own choosing.

If you've not got a newsreader, NewsCoaster is worth trying out. It does have some problems, but the author is always eager to hear from users who may have ideas on how to improve the product. I would suggest the addition of an online help system.

BirdiePrefs
To round off this month, a Graphical User Interface which allows the setting of various preferences associated with Birdie. For those that have never used Birdie, it is a small utility responsible for putting patterns into the window borders that you may have seen in some of the screenshots throughout *Amiga Active*.

BirdiePrefs allows you to build a list of patterns that will be used in Birdie; it can change the appearance and pattern of the currently active window, and has an option to turn off icon borders, which it apparently does in a cleaner way than Newlcons. If you've always wanted to use Birdie but didn't fancy the clumsy command line interface, this freeware utility will allow you to experiment with the options to your heart's content.

Simon Archer A
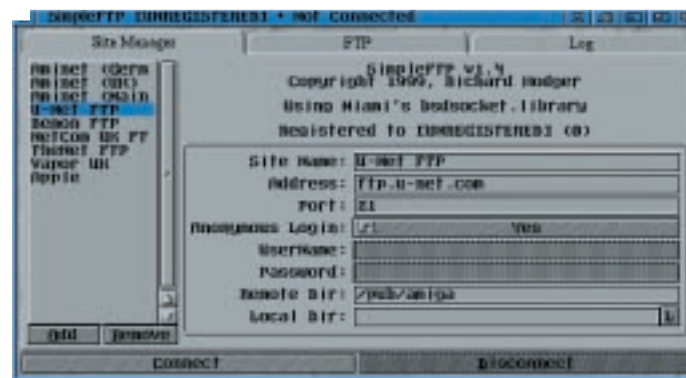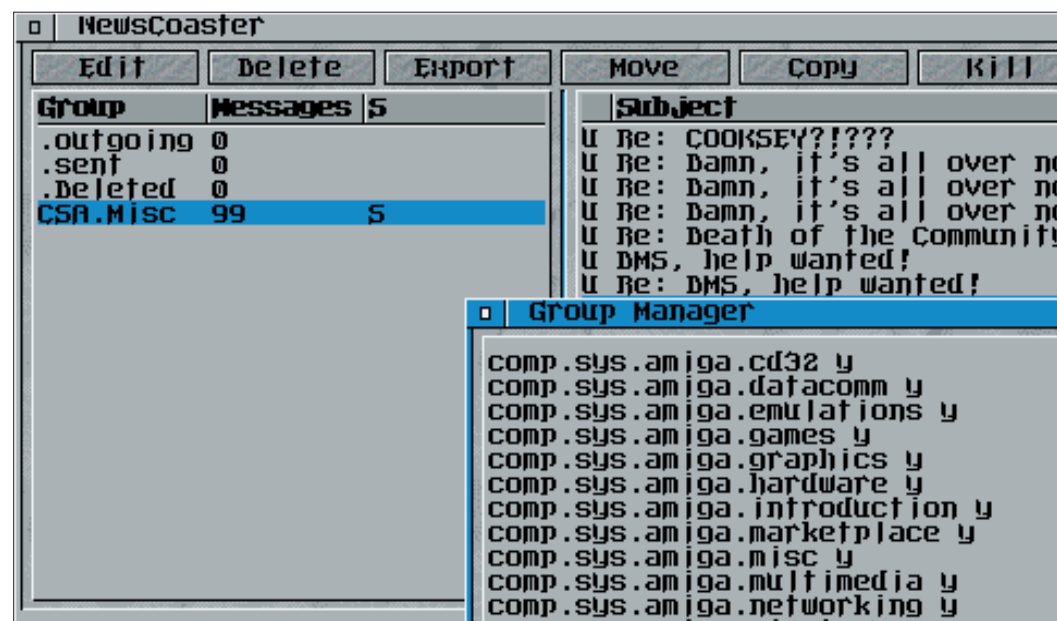
Above: It's not the news (that's on page six), or a mat for putting your drinks on - it's the usenet/coasting hybrid that is Newscoaster 4.

Amiga
Adventures

All set for a non-stop adventure in Amiga gaming? We take a look at some of the titles which should be coming your way pretty soon.

Given the immense popularity of adventure games, it is rather surprising that there haven't been more released for the Amiga in the last few years. ClickBoom's conversion of Myst remains the best selling Amiga game of the last couple of years, so it's about time someone came up with a challenger. This month we take a look at a few of the upcoming pretenders to the adventure game throne...

Gilbert Goodmate
(Bottom and above right) This Amiga / PC adventure developed by Prelusion will be published by Crystal Interactive Software in the New Year. As you can see from the screenshots, the artwork is superb, thanks mainly to the artists on the Prelusion team who have worked for leading animation studios. With graphics

like this and a soundtrack voiced by professional voice artists, "Gilbert Goodmate and the Mushrooms of Phungoria" (to give it its full title) is set to be a landmark Amiga release.

Diablo's Land
(Left) Digital Dreams Entertainment are following up their recent game Wasted Dreams with another arcade adventure game, Diablo's Land. Screenshots are looking good, and a high quality soundtrack with speech is promised. DDE are promising role playing elements, with a choice of character classes as well as objects to collect and skills to learn and develop.

Evil's Doom SE
(Right) The special edition of Titan's Evil's Doom, a role playing game, has been promised for quite a long time now. The graphics look good, the demo looks good... when are we going to see the game?
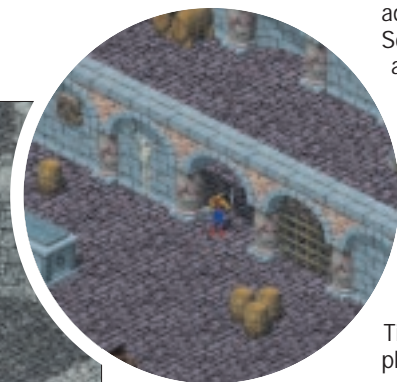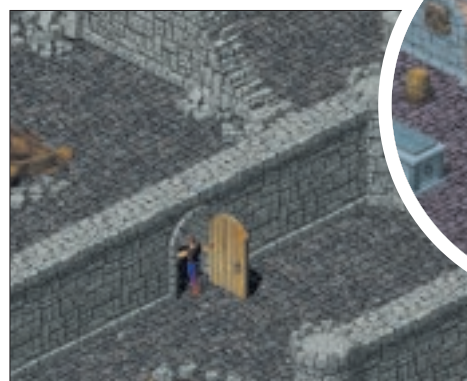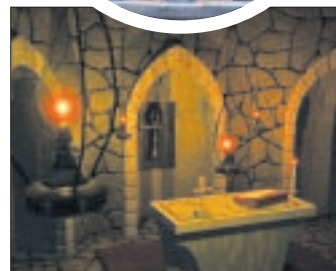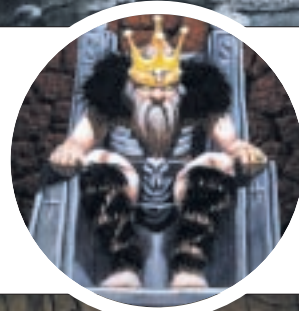
ClickBoom: working hard, all
Nightlong

Time to make space for another three Compact Discs on that shelf of yours, warn ClickBoom...

The folks at ClickBoom don't rest on their laurels. Following hot on the heels of the single-CD horizontal shoot-em-up T-Zer0 (reviewed last issue) comes the triple-CD bonanza that is Nightlong. Yes, you read that correctly. Three CDs. Six, if you're after both the English and German versions - there's not room for both, even on three discs.

Using the AHI retargettable audio system for sound and supporting graphics cards via Picasso96 and CybergraphX, Nightlong for the Amiga is

currently a 16-bit graphics card only game, although by the time you read this ClickBoom should have made a decision regarding an AGA version.

Minimum requirements for the title currently stand at an '030 Amiga with a graphics card, but an AGA version - should there be one - will probably require an '040 due to the intensity of the in-game graphics and because that, although Nightlong comes on three CDs, there still isn't room for both 16 bit and 8 bit versions of the movies and pictures used in the game. This

means that AGA versions of the graphics will need to be rendered down to 8 bit on the fly.

As for a PPC version, that too has yet to be decided - visit ClickBoom's web site (www.clickboom.com) for more information which should be available by the time you read this.

Inspired by the cyber-punk books of William Gibson, the absorbing single-player experience from Italian developers Trecision was released for the PC last year by

Team17, and the Amiga version is due to be released by ClickBoom within the next couple of months.

If you can't wait that long, you'll be able to get an idea of the polish with which the Amiga version should emerge from the ClickBoom furnace by looking at the screenshots on this page and viewing the exclusive *Amiga Active* preview which you'll find - along with more screenshots which we couldn't fit in the magazine - on this month's cover CD.

Socks...vests...boxer shorts, stuff. Nothing interesti
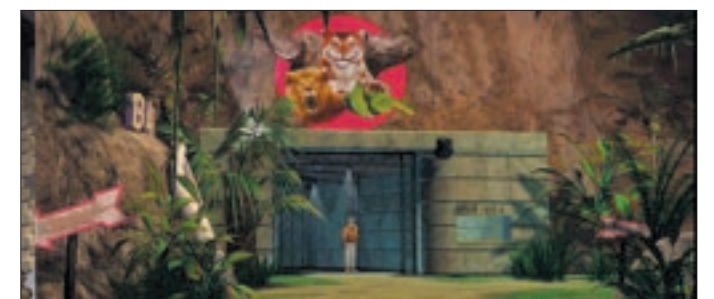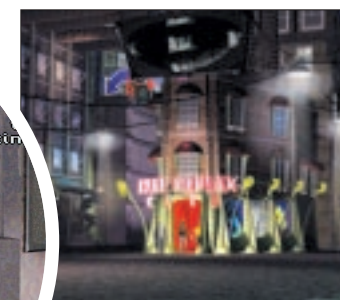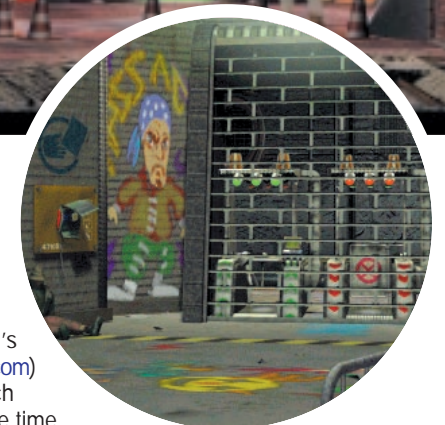
WipEout 2097

preview

Psygnosis abandoned Amiga developers years ago, yet here comes WipEout 2097. How come?

Not so long ago, computer games were considered much more anoraky than they are today. Then Sony came along with its PlayStation and all of a sudden it was trendy to sit in front of a TV playing with your jigglestick. WipEout 2097 had a lot to do with this shift in attitude.

Sony knew what they were doing. They'd taken over our old friends at Psygnosis some time before, entrusting them with the platform's flagship game. Drafting in credible but popular names to supply the music and farming out plenty of the visual direction to the Designers Republic were two vital masterstrokes in the marketing of the game. It was hailed as a masterpiece throughout the popular media, and from then on

the PlayStation's status as an essential lifestyle accessory was assured. Now WipEout 2097 is coming to the Amiga via a conversion from Digital Images.

However, not everyone is totally enthused with this game. Some people with a soft spot for almost all racing games complain that WipEout 2097 has sluggish controls (but we're getting a mouse control option which could improve things) and dodgy collision detection, while those individuals who normally profess to dislike racing games can't get enough of it. Still, we're not here to review it yet.

For the benefit of those who have managed to avoid the game, here's a quick overview. It's set 98 years into the future, and for some reason the world is shrinking "like a raisin from a

grape" - which reminds me, I must get some more of that ointment. Anyway, this sorry state of global affairs means that everyone has to race through Bladrunner-esque cities in things that look like powerboats (sounds logical enough when you think about it).

There's hardly any gravity either, which means everything floats and bobs around a lot. The late 90s concept of road rage has taken its natural escalatory course, so that these days you can expect to be blown up by a homing missile on your way to Tesco's if you cut someone up on a bend.

The rumour that it was going to be called "Ridge Racer With Floating Cars" contains no truth whatsoever, but is plausible. Are you getting the picture yet?

Snakebite techno

WipEout 2097 comes with a star-spangled line-up of audio tracks from a bunch of bands who make the kind of music that sounds best after about six pints of snakebite. Allegedly. The delectable selection of tracks includes an instrumental version of The Prodigy's number one hit "Firestarter," along with others from Fluke, Underworld, The Chemical Brothers, Photek and CoLD SToRAGE (in-house musicians at Psygnosis).

You'll be getting all of these on your Amiga CD as standard audio tracks, so even if you get bored of the game, you've still got a nice little compilation of quality tunes for your hi-fi.

"...even though it's going to have a severely limited audience, at least it should match the original..."

Will it work?
This is all very well, but we're talking about an Amiga version here. I don't need to remind anyone how the average Amiga system shapes up to a PSX in the 3D department. However, as the forthcoming demo should prove, it's not quite the impossibility that you might imagine. That is, it should prove it if you've got an Amiga capable of running the demo.

The minimum system requirements are as follows: PowerPC 603e, 3D graphics card (CV64/3D or a Cyber- or BlizzardVisionPPC), 1MB hard disk space, 24MB Fast RAM, CD-ROM drive, OS3.0+ and Picasso 96 or CyberGraphX software.

Yes, it's encouraging to see game developers aiming high and supporting the best hardware. There would be little point in making a 680x0 version

that runs on an AGA chipset in a 200 x 200 pixel window, so even though it's going to have a severely limited audience, at least it should match the original, or even the graphically superior PC version.

If you were in attendance, cast your mind back to this year's World of Amiga show, and more specifically the demo which was running on the *Amiga Active* stand. This was virtually a pixel-perfect clone of the original, running at an ever-so-slightly jerky but still quite playable framerate, hampered by a relatively slow PPC card and unoptimised code. Digital Images are aiming to get the finished article running at about twice the speed of that version, which should show a substantial framerate increase on more powerful set-ups. In fact, it looks rather better than the PSX game,

with additional tricks courtesy of the Amiga's 3D hardware.

The big question
I know it's not customary to say anything even slightly derogatory in a preview, but there's one question that keeps rearing its ugly little tortoise head: "Why?"

I'll be very pleasantly surprised if this incarnation turns out to be massively better on balance than the PSX or PC version. I haven't checked the price of the PC game, but you can certainly get the PSX version for a knockdown price now. If you like 3D games, surely you have a PSX or a well-endowed PC? And if you like 3D games, surely you've got this already, or if not, isn't that because you've tried it and just didn't like it?

I'm sure you've got a very valid reason to want to play it on your Amiga - if only for the coolness factor of having WipEout running in a Workbench window. If you've got a PPC accelerator and a 3D graphics card you'll probably be desperate to buy anything decent that actually takes

advantage of the hardware. Also, when we see G3 and/or G4 cards become available, it might turn out that this title has blazed a trail for a string of similar conversions, maybe even some current games. Okay, I'll shut up about it now.

I apologise if it sounds like I'm coming down a bit hard on this game before it's even finished, but I'm just being realistic. However good WipEout 2097 is, we shouldn't have to be so starved of contemporary computer games that we all get worked up into a lather when we get something that the rest of the world has already been enjoying for a couple of years.

To be honest, it does look as if WipEout could well shape up very respectably against its PSX and PC counterparts - if you've got the highest end hardware it should be quite special. If you're a fan, then you're almost certainly in for a treat. Let's hope we see a lot more of this kind of thing happening in the near future.
Tony Horgan A

Audio fax

♫ The robot voice ("missile") used in the PlayStation and PC versions of WipEout was generated by nothing other than an Amiga 1200.

♫ Future Sound of London also made the seminal 80s acid track "Stakker Humanoid," which sounds fab alongside WipEout 2097.

♫ The Chemical Brothers used to be called "The Dust Brothers," named after their favourite American hip hop producers. Isn't that nice.

♫ The real name of drum & bass producer "Photek" is Rupert, as in "Rupert the Bear." Not so hard now are we?

Specs and Features

- 8 tracks
- 5 ships
- 8 weapons
- 9 CD audio tracks
- MPEG animations
- Keyboard/mouse/joypad controls
- Runs on resizable WB window
- MIP mapping & fog
- Gamma correction
- Optional frame rate limitation
- Other Amiga-only stuff

Virtual GP

The lights turn green for Paolo Cattani's VGP.
Will it get off to a flyer or stall on the grid?

"...I'd say that Virtual GP is about 99% true to reality..."

There really hasn't been a 3D racing game to hit the Amiga that could rival Microprose's excellent, but now painfully out-of-date, F1 Grand Prix. Since then, many have tried to emulate and improve on Geoff Crammond's standard, but even the best attempts have failed to retain the realism of F1GP. F1 tracks, cars and drivers have changed a great deal since the Microprose days, and we really need something that's up-to-date.

Virtual GP is based on the 1998 Formula One Grand Prix season, and boasts 22 different cars and 16 tracks to race on. It would have been nice to have this season's tracks in place, but considering the accuracy, you have to appreciate the time involved. Being an avid F1 fan, I compared each track against my book of 1998 season track maps and overall I'd say that Virtual GP is about 99% true to reality. You can't complain about that!

Hard Drivin'
Getting into the game is quick and easy, and there is no shortage of things to occupy your mind. Once you've chosen your car you can configure pretty much every mechanical option. Everything from tyres to the gearshift ratios can be altered - and when you get around to racing, it really does make a difference - the handling of the car changes wildly with every adjustment, as it should do, making every change crucial to keeping your place on the grid and your car off the grass.

Out on the track, Virtual GP doesn't really differ much from other 3D racing games. Everything is squarer than it needs to be, but the cars are still recognisable even when the backgrounds aren't. Each car has a display showing speed, gears, position and fuel load, and the actual game controls are fantastic. Racing is all-engrossing thanks to some good collision-detection and excellent animation, giving a good feeling of speed.

The best thing about Virtual GP is the controller support. As well as standard Amiga joysticks, pads, mice and keyboards you can use analogue controllers and steering wheels (with the appropriate port adapter). Using a wheel or analogue joypad really makes a difference.

Steering, braking and gear changes are all more responsive, and when you're flying down a straight that extra split second is essential in getting past the rather bold grid of computer-controlled opponents. The artificial intelligence is a bit patchy, but the desired effect of making every race feel different is still evident, even if the Ferrari look-alikes sometimes behave more like Minardis!

The default view is from the cockpit which, due to the lack of a steering wheel in on the display, looks a little weird. Thankfully you can choose between six cameras, letting you view the action from various angles in the car, behind the car, and from trackside. The same applies to action replays, which can also be shown in slow-motion and freeze-frame - ideal for reviewing the error that caused you to plough your car into an advertising hoarding.

Good, better, best
Three versions of the game are supplied on the CD. There's a standard low-res version that will run in 320x256 (recommended for anyone running less than an '040 machine), a medium-res 320x512 version (which really requires an '060 under AGA) and a double-buffered version for use with graphics cards. Under AGA it looks good and animates smoothly, but graphics card support proved to be rather shaky. That aside, as long as you run the right version for your machine (the minimum spec is an '030/25) it'll thunder along at a respectable 20fps or better. Virtual GP pays for its speed by having a slightly flawed 3D engine, evident if you drive too close to the walls.

Although I'm a real stickler for detail in games like Virtual GP, it was hard to fault its accuracy. Gameplay is just right, the graphics are good, though there is room for improvement, and the control options are the best ever. Hopefully a few visual enhancements will be worked into the promised PPC version. The game can be a little tough for the casual racing game player, but for anyone who's serious about racing, Virtual GP is an absolute must-have.

Chris Green A

Virtual GP — 7/10

SYSTEM: 4MB RAM, '030, CD-ROM, AGA or Graphics Card.

SUMMARY: Fast and good looking. So, that's two up on Damon Hill already.

Foundation DC

In case you missed it the first time around,
Foundation is back, and better than ever.

Above: Hi-Res, shading, and still playable on a top end machine. If you can make out the icons that is.

Despite the rush to sign up well-known games to port, one of the most successful games on the Amiga during the last couple of years was this homegrown effort. A game that may go down in history as the last hurrah of the "bedroom programmer," Foundation was developed almost single-handedly by developer Paul Burkey. Dodgy polish, no depth and suffering from a dearth of features then? Oddly enough, no.

Foundation, being rather more akin to Settlers than Civ (realtime instead of turn based, resources over combat) really excels in the resource management system. You can tweak the levels of consumption and production in each building, allocate a workforce as you like, and even motivate them to produce certain things above others. Your minions rush around moving things about for you without too much of a guiding hand - these guys are so much smarter than the little monkey fellows in Settlers that they can find their way from door to door without the benefit of roads!

The productivity of your people drops if they get sick or unhappy and if you try cheering them up by opening a brewery, they all go and get drunk. Combat is simple and functional within this context, but it could be expanded in scope a lot more.

Foundation Director's Cut is a budget re-release of the original game, although you might think to look at it that it was an altogether new title. Since Foundation was released nearly a year and a half ago, Paul Burkey has released an unbelievable number of patches. FoundationDC contains all these patches and a few tweaks of its own - now you can even play in a window on your Workbench.

FoundationDC has a significant speed upgrade - it's now very acceptable at 800x600 resolutions if you've got a good CPU (and, of course, a graphics card). Even better, there are significant visual improvements to be had by way of the Gouraud shading and blending modes. Thanks to these added extras it now looks really rather gorgeous. The landscapes are lush and detailed, the buildings and characters look fine and the lighting is deliciously well executed. The darkness of the unexplored areas seems a much

"...if you try cheering them up by opening a brewery, they all go and get drunk."

more forbidding place thanks to the new shading routines - you can just imagine your little cartoon people drawing little cartoon maps with the words "here be dragons" printed on the expanses of unknown territory.

On the gameplay front, the improvements are rather subtler. There have been a few minor tweaks to the graphical control system which makes navigation easier, but it is annoying that the icons remain so small and inappropriate to larger resolutions, especially given all the spare space in the control panel. There have been countless gameplay tweaks to improve balance - the difficulty progression is now very effective. AI routines seem to have been sharpened up a fair bit, too - your men are far better behaved than in the original release, where you could frequently found yourself wishing for the hand out of Dungeon Keeper to slap those peasants about a bit.

That aside, there are still a lot of things that could still be done to improve Foundation. The character animation is pretty ropey; it's better when the little fellows move sideways, but walking downwards seems to make these strange fellows do the watusi. Building animation is restricted to a flag that flaps in

the breeze - the game would benefit from a few frames of animation for each building to give a little visual feedback on how they are doing. There should be more extensive use of the pop-up help system (indicating what resources all those tiny icons represent would be a good place to start), and the controls should be spread out a little more.

If you already own Foundation, you'll want the patches rather than the Director's Cut. If you want network play, more advanced features, more units and so on, you'll have to wait a little longer - Paul Burkey is currently developing a true sequel, "Foundation's Edge." If, on the other hand, you have yet to try Foundation, this is a great opportunity.

Andrew Korn A

Left: I think I'll stay at home today.
Below: Another keystone cops chase!

Foundation DC — 8/10

SYSTEM: 6MB RAM, CD-ROM, AGA or graphics card, '030 or better CPU.

SUMMARY: A truly excellent God game, now at an even more excellent price.

Best of
Gremlin

A bumper pack of memories on CD? Or not?

Newbies may be familiar with Gremlin Interactive as the name behind such console classics as Body Harvest and the Actua Sports series. Older people, on the other hand, shiver with happy nostalgic flashbacks to times of Zool, Super Cars and the be-all-and-end-all of two player racers; Lotus Esprit Turbo Challenge 2.

In the A500's hey-day, Gremlin were seen as today's ClickBoom. Their releases were highly anticipated by many, especially after 1990's Super Cars. This was followed by many other landmarks in Amiga gaming history; Venus the Flytrap, Switchblade, Super Cars 2, Premier Manager and, of course, the hugely successful Lotus Esprit series and the most successful game of the brief craze for Sonic the Hedgehog clones, Zool. Now, thanks to Islona Entertainment in close collaboration with Gremlin themselves, we can tremble with excitement once more, with the opportunity to experience nearly every classic Amiga game from Gremlin.

No less than 25 of the tip-toppest Gremlin games appear in their full glory on this new CD, from the aforementioned Super Cars (and its sequel) to the hardly-ever-heard-of Vampire's Empire. There should be something for everyone.

The CD is compatible with both Amiga and PC. There are a few games that will run direct from the CD, thanks to the now infamous WHDLoad and JST hard-drive installers and patches, but the majority of the games arrive as either DMS files (for the Amiga) or ADF files (for the PC). There's a simple front end for accessing these files - simply click the icon and a requester appears offering a choice of DMS files. Then insert a disk and the game will be unpacked. Easy.

Unfortunately, it's not all as easy as it seems. If, like me, you own an '040 processor or other higher end set-ups, getting the games to run isn't quite so easy. These games from Gremlin were written with the A500 in mind and don't all work on modern systems. So what's the answer? Apart from dragging your old A500 out of the attic, you could try the many system degraders Islona have thoughtfully included on the CD. Nine times out of ten you'll find one that works, but for high end users, this CD can be a bit of a lucky dip.

Highlights of the disk are the "Super Cars" series, both incarnations of Zool (including the AGA versions), Premier Manager 1, 2 and 3 (as well as the complete PM3 Multi-Editor System), Shadow Fighter, Litil Divil, Switchblade and its sequel, and the much underrated "Plan 9 From Outer Space." Strategists will revel in Utopia, K240 and Federation of Free Traders, while T-Zer0 fanatics may like to dabble in Disposable Hero, Pegasus or Video Kid. Of course, the CD has a fair share of dross too; Motor Massacre could well pass as an AMOS shareware title and Techno Cop is barely worth the 800k it takes up on the CD, but thankfully, the good outweighs the bad by far.

The Best of Gremlin deserves its title and Islona Entertainment have done an admirable job of getting all these games together in one place. What's more, as well as full manuals for each game (in basic text format), there are hints and cheats for each game and a worthy selection of MOD, MIDI and SID tunes. This truly is a worthy addition to any game fanatic's library.

Robert Iveson Ⓐ

"Islona Entertainment have done an admirable job..."

But what of Lotus?

Gremlin's finest hour was probably Lotus Esprit Turbo Challenge 2. So why is it not on the CD? The same could be asked about the also excellent Toyota Celica racer. There's a simple answer - licensing problems. Although the Lotus games belong to Gremlin, the license for the name still belongs to Lotus. Islona would have had to shell out cash to the Lotus company to even include a logo on the CD cover, so all the Lotus (and Toyota) games had to be omitted. Shame doesn't even begin to describe it.

Gremlin CD **8**/10

SYSTEM: Any Amiga with a CD-ROM drive.

SUMMARY: Classic in every sense of the word, despite the lack of Lotus.

Interactive

Send your letters to: Amiga Active Magazine, 3-11 Spring Road, Bournemouth, BH1 4PZ. Or e-mail interactive@amigactive.com

Not stacking up?

Hello,

I got the first issue of AA this morning. Well done on a very good magazine. However, I am having problems running the CD. When loading the CD and clicking on 'AACDPrefs' I get a requester up saying that a MUI NList object is having trouble with the stack size of my "Background CLI". It then goes on to say I need to up the stack size as the MUI "NList object creation will fail". Then I click OK and another requester comes up saying "Error 10 in line 68".

The same thing happens if I try to access the prefs via the CD / AWeb. Could you tell me how to up the stack on my Background CLI? (BTW, all my MUI stuff is already set to use a stack of 10,000).

Pam J.
via e-mail

Yes, unfortunately there is a bug in the preferences program on the first AACD that only seems to appear on some Amigas - it didn't show up on any of the Amigas used to test the CD.

The CDPrefs program on this issue's coverdisc has been fixed, so just set your preferences from this month's AACD and everything should be working as intended once again.

Good and bad points

Hi to all at AA

I would just like to congratulate you and thank you for a job well done on your first issue. The pages are well laid out. The print and paper quality excellent (please do not under estimate the importance of paper quality, we can't have our new Amiga magazine written on toilet paper now can we!)

The magazine is well and truly jammed to capacity with articles and very tempting adverts. Just holding this quality magazine in my hands has revived my spirit and faith in he future of Amiga. Back 2 back adds a nice touch to the reviews and the scoring system is simple and effective. Perhaps a Good and Bad points section could be added to the box

out, to compliment the summary? Peace.

Zanthras (Phil Meason),
via e-mail.

We've actually been writing reviews with good and bad points but not printing them - it's something that we aren't 100% decided on. What do the rest of you think?

"The magazine is well and truly jammed to capacity with articles and very tempting adverts..."

Twilight Zone

Hello,

I walked into my local newsagent looking for something to read over the weekend and I spotted the letters A-M-I-G-A minus the word Format and I thought "What the hell is going on, have I fallen into another dimension where there is more than one Miggy mag available here in Irish newsagents?" I quickly grabbed a copy from between "PC This and PC That" all of which looked the same apart from the cover. I opened up and quickly flicked through the magazine and I must say, I liked what I saw.

Plus points:
- Excellent layout
- Excellent CD
- Just enough info
- No waffle

Can't think of a single minus point... perhaps the lack of a music/sound section? Other than that it was an informative and fun read. Nice web site too. See you in a month's time.

David Henry,
via e-mail.

Do di do do, do di do do...

You're travelling through another dimension... a dimension not only of sight and of sound, but of Boing - a journey into a wondrous land whose boundaries are that of imagination. That's a signpost up ahead: your next stop: *Amiga Active* land!

Your comments about music and sound coverage have been noted. Unfortunately, not much has happened in this field on the Amiga for a few months, but we are aware that we desperately need to have more music coverage and should have something in the near future, all being well.

Sticky Situation

Hello all at *Amiga Active*,

Great first issue, one qualm though - the glue used to stick the cover CD on with. It allowed the disk to come of easily - but trying to remove the remainder from the magazine was a nightmare!

Yours Sincerely,
Mr G A Henon/George

Yep, sorry George (and everyone else!) - it's true: the glue was not good. We've asked them to change it.

Show us the goods!

Hi *Amiga Active*,

Well you guys said it, Amiga owners are active (perhaps pro-active). If something looks good and we are informed enough, we'll pre-order. For me I pre-ordered a subscription to show support for your efforts. I have subscriptions for both AF and AA. A note to games publishers - if you do a good job of catching our imagination and tempt us with screen shots etc., we'll pre-order. ClickBOOM seem to be good at this - my latest pre-order was T-Zer0. I do think Amiga owners are active. We'll buy what looks good - go on, tempt us! You know we want to spend our hard earned cash....

Then came the day.... my shiny new copy of *Amiga Active* dropped through my letterbox. I'm very pleased to say it's a fine first issue. I found that over a few days I read ALL of it and scoured all the ads. I tend to skim through a mag first, read articles that catch my eye the most, then over a few days read the rest. One of the best articles had to be "Back for the Future," interesting and informative (I'm sure you guys know that apparently the NG Amiga will be no more? Perhaps your stop press about Jim Collas will be more important to us Amigans as things develop?) Oh yes, "Rants & Raves" was thought provoking... if there is such interest, surely things can only improve? What are the likes of Sun and Microsoft interested in?

Just a thought though - I reckon a lot of Amiga owners are "users" (no, not dope heads!) For example, while I have no problem with pulling my Amiga apart, putting it in a tower, strapping the Power Flyer, new 3.1 ROMs, a

"...a shiny, glossy page with a familiar symbol on the front..."

Zorro IV + Picasso and all manner of other bits together but have little interest in advanced tutorials. I understand that some Amigans benefit greatly from this type of article, as a lot of them use C+, ARexx etc. but if you were to lose pages and pages from others this may affect the content. A careful balance would definitely be required.

Cheers,
Phil Bennett.

Sorry for cutting your letter Phil, but space is limited and we wanted to focus on some good points you make (the comments in the rest of the letter were appreciated though!).

We take your point about "users." A magazine like *Amiga Active* needs to strike a fine balance, so we want to hear from you if you think we're getting it wrong. One of the key aims for the magazine is to help people to use their Amigas, and this means slightly different things to different people. We'll do our best to cater for everyone, which means keeping the people who like advanced tutorials in technical subjects as well as beginners happy, but the things we will emphasise most are the issues that we all face as day-to-day users of the Amiga.

The amount of computer industry interest in the Amiga is indeed very promising. The Amiga has always been a very people-oriented machine, and the computer industry is waking up to the fact that they've can't

afford to miss this all-important element any longer. Even if Amiga themselves do nothing and the future isn't named Amiga, it will be Amiga shaped. Oh, and as for your comments on pre-orders - software companies take note!

New Amiga mag

Hello there,

I popped into Smiths on Saturday, to see if the latest AF had hit the shops. As I despondently hunted through the PSX, Dreamcast, Nintendo, PC, even Archimedes mags, I was growing more and more despondent. Then my eyes alighted on something new. A shiny, glossy page, with a familiar symbol on the front: the Boing ball, held aloft on a red flag (often the symbol of revolution), and a magical name at the top of the page. It was that most unique of rarities... a new Amiga mag.

With hushed tones and an almost reverential gentleness of touch, I prised my glittering prize from amid the console madness to which it had been consigned.

Upon reaching the cafe where I was going to have lunch I suddenly felt a pang of mistrust. Could this be fool's gold? Could it just be a group of sad Amigans doing a PC Gamer type affair? The host of familiar names set my worries aside: Neil, Andrew, Jason, and Tony. Truly, the high priests of the Amigan faith were back amongst us, preaching the good word. Verily I applaud thee.

I wish all at Pinprint the very best of luck. There has been a void since the demise of CU Amiga. *Amiga Active*, on first reading, seems more than capable of filling it. A refreshingly different layout, the right blend of techie and plainspeak. A lovely CD-ROM approach, an extension of the magazine rather than a glorified freebie. I look forward to issue two. By the way, putting a publication date on the Next Month page would be nice.

Regards,
Mick Snowden. ▶

Right. Next Month page. Date. Good point. D'oh!

POWER COMPUTING LTD.

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www.powerc.com

Tel: 01234 851500

"...hey, that's that new one they were talking about a while ago"

▶ **More tutorials.**
Dear AA,
Thanks for an excellent first issue of *Amiga Active*. The quality of writing and educational content was exceptional. I especially loved the mini-tutorials within reviews.
The only thing I can be picky about are the non-CD covers (but can understand if it saves a lot of money/space).
Any possibility of having more tutorials/projects involving the great gfx software (Wildfire PPC; Tornado 3D; Photogenics 4; ImageFX 3; Candy Factory Pro etcetera)?
Well done, and look forward to receiving the rest of my subscription. Excellent value.
Gary Storm
via e-mail.

Hi Gary. Thanks for the compliments. We did a little research into the CD cover issue and came to the conclusion that most people discard theirs, and

been impressed by a magazine before. I hope everything goes well for you.
Regards,
Mark Logan.

Well, either you missed out a "so" in your penultimate sentence or the magazine industry needs to buck up its ideas! Seriously though, thanks very much for your comments - and that goes to everyone else who wrote in. Only one thing - surely someone's got something bad to say? We can take it, honestly!

Mmmmm.... Glossy!
Mmmmm...glossy paper...lots of white...full page Blittersoft advert.. great looking magazine chaps! I especially liked the "Top Gear" and "Gallery" sections - they add variety to the usual reviews and news.
Most of the articles seemed to leave me wanting more (news / detail / explanations) and I'm not

"Only one thing-surely someone's got something bad to say...?"

opinions are split 50/50 on the issue. That being the case, we felt it was sensible to save the money for better things.
So how did you like the Candy Factory Pro piece this month? We will be regularly running getting-the-most-from and doing-something-different tutorials on a variety of subjects and software. Issue one was a little light on this front because there was so much to review.

First for everything
Hi,
I happened to see your magazine last week and thought - 'hey that's that new one they were talking about a while ago.'
So I bought it and it's such a fresh change from all those other magazines sitting on the shelves. I really can't explain why so maybe this e-mail is pointless, but you have captured a very appealing structure. I've never

sure whether this is whetting my appetite or making me feel like the articles are too skimpy. Time will tell, but the layout is great and balance about right so far.
Could you possibly refrain from publishing commercial software on the AACD's though? Even old versions of software can prevent Amiga owners from seeing the necessity of actually paying for the (most recent versions of) software. A very good start though - keep up the good work. I for one will be buying copies (and using the CD-ROM when I get OS3.5)! I may even subscribe!
David Cox,
via e-mail.

Commercial software is a tricky problem - it has good and bad points. We hope that our CDs offer enough incentive as it is, and don't plan regular commercial covermounts of commercial titles, although if

ML musings

Stuck to the cover, but not for words!

Amiga Active magazine runs an e-mail mailing list open to all our readers. We currently have around 200 people on there, so it's not too crowded - if you want to join you'll find the details on our web site, www.amigactive.com. Here's a taster of the comments made on the list when issue one hit the shelves...

Bad glue
The first person to get in with a comment about the mag was Martin Taylor, who seemed to be deeply impressed by the Cloanto T-Shirts. Andy Wanless chipped in with some harsh criticisms:

"The bloke on the front cover. Don't like his haircut. Could have someone's eye out with hair like that."

Tudor Davies and Matt Sealey got into a debate about the pros and cons of jewel cases, but agreed that the glue ought not to stay stuck to the cover. This theme was rapidly picked up by all and sundry. Matt got wallpaper and cat stuck to his glue, while Bill Eaves claimed it stuck to everything. Mattie Whittle came up with the clever solution of covering the glue with tape. However, a consensus quickly developed that the glue CU Amiga used to use was the right one - not only does it come off easily, but appears to give our readers hours of fun. Meanwhile, AA contributor Chris Green lamented on how he missed throwing it at his workmates, while Martin Taylor shocked the masses by confessing to owning a ball made of 25 CDs worth of the stuff...

Small cars
Glue wasn't the only thing that some people wanted to see us pick up from CU Amiga. Robbin Van Ooy wondered if **Amiga Active** could do an O-Z to carry on from CU Amiga's A-N. Gary Waddington wondered if E2260 Diary and Techno Tragedies could come too. Andy Kinsella opined that **Amiga Active** is not "Son of CU Amiga," and should do its own thing.
Of course, even if we wanted to we couldn't really continue something owned by an altogether different publisher. Tony Horgan, editor of CU Amiga when it closed, made a radical suggestion for something else from CU that he thought should be re-instated - his company car. This rapidly degenerated into a debate about how many 6ft+ people you can fit into a Ford Puma.
We fear that the mailing list is unlikely to recover fully until people get this issue to discuss...

something interesting comes up we will evaluate its merits and the harm it might cause. After all, the last thing we want to do is make life harder for our advertisers!
By the way, why wait for OS3.5? The CD is optimised for

it but runs fine on older versions of the Operating System too, so get stuck in!
If you have any comments about our cover discs, feel free to e-mail your suggestions to us at the following e-mail address:
aacd@amigactive.com A

Using
PDF
Portable **D**ocument **F**ormat

You've probably been seeing more and more documents appearing in .pdf format, especially if you download brochures from the 'net. You can't read them in Multiview, but you can do more with PDFs than you may think.

One of the more frustrating things for Amiga users is seeing new standards appear everywhere else before we get to use them. One of the most successful new standards is the Portable Document Format, PDF. This format was developed by Adobe to provide a more compact and portable alternative to their own Postscript page layout description language. It's small enough to be published on the Internet, yet it can contain layouts as complex as those in this magazine.
Adobe produce a freeware PDF reader called Acrobat Viewer. It's a very nice utility, but alas there is no Amiga version. They also produce Acrobat writer. Again, there is no Amiga version. Luckily, thanks to some third party developments largely adopted from the GNU open source scheme, all is not lost.

PDF Amiga
There are actually a number of different utilities available on the Amiga for handling PDF files, notably the recently released Apdf and Ghostscript, the GPL (Gnu Public License) postscript interpreter system, which supports PDF too. Various libraries and components also exist that may, in future, provide solid Amiga native PDF tools. Although the available software has its limits, you can read the majority of PDF files, and even write PDF files yourself. There remain certain limits to what can be done with PDF files on the Amiga. PDF supports a degree of interactivity, something none of the Amiga software handles fully. It's not a big thing; Apdf copes with bookmarks, which is about the limit most documents use. There will, however, be the occasional PDF file that uses menus or images that pop up when the mouse passes over a certain point, form fields, or multimedia files such as sounds. You won't be able to use these files properly with Apdf.
Writing PDF files is more of a problem. The way PDF files are normally generated is by using Adobe's Distiller on the PC or Mac. This allows you to convert a Postscript file, as output by any desktop publishing program or most word processors, into a PDF document. Postscript of course has none of the interactive functionality - Acrobat gives you an interface for adding features such as hotlinks or form fields. We may get to see Acrobat on the Amiga when there are next generation machines, but until

"...you can read the majority of PDF files, and even write PDF files yourself."

then we'll just have to satisfy ourselves that we do have a working equivalent of Adobe's distiller via Ghostscript's PDF descriptors.

More than a pretty face
Even without the glitz, PDF is an extremely useful format. Unlike ASCII or RTF formats, it includes layout commands, pictures and vector effects. It will also store fonts embedded within the document to ensure compatibility when any fonts other than the standard Postscript ones are used. This makes it a popular way of passing on a page layout that you can be sure will look the same on whatever system it is viewed on. For any kind of technical documentation, manuals, reports, brochures and so on, this is a very valuable ability - you know that your audience will see what you want them to see. It's also compact enough for low bandwidth delivery, via the Internet for example.
PDF can also help in document production. You can convert your Postscript files to PDF to "pre-flight" them, viewing the actual postscript image as a PDF before delivering it to your printer. You can email a client an exact copy of your layout for quick approval, send the printers an electronic guide to work from, or even avoid Postscript altogether, sending your printer the PDF file to print from. Many people in the pre-press and printing industry expect PDF to replace Postscript altogether, in time.

Apdf
Until this utility appeared, the only useful way of viewing PDF files on the Amiga was through Shapeshifter, cumbersome at best. Emmanuel Lesueur's Apdf is basically a derivative of the Unix PDF viewer Xpdf by Derek B. Noonburg, given a nice MUI based GUI. It supports bookmarks and can do things like search the document, extract the text, or output the file to a Postscript printer. There's no support for navigation aids such as indices, but the GUI is straightforward enough.
Apdf does not provide perfect output. Although it only supports PDF up to version 1.2, it misses little, but it does seem to have ▶

problems with some Postscript draw functions. It will give up completely on some documents; the Acrobat standard contains a rather pointless encryption routine which is not included in Apdf because the US won't allow the routines to be exported to France, where Emmanuel lives.

Apdf provides a very useful fontmap management system. This allows you to remap the fonts used in the document to whichever of your system fonts you choose, allowing you to tweak the settings for best effect and best readability. You can set the fontmap globally, or use options best suited for a particular file and save the custom fontmap information to the tooltypes of the PDF's icon for future use.

Below: Use Apdf to view online .pdf files.

Below: Apdf has a nice font mapping utility.

Below: Made on Amiga, viewed on Amiga.

Ghostscript

Ghostscript is an open source Postscript. As with most applications originating on Unix it's horrible to use, driven by Command Line instructions only. However, it's a useful piece of software which can display both Postscript and PDF files, and contains an Acrobat Distiller clone, allowing you to produce PDFs direct from Postscript files.

To help you use this ergonomic nightmare, *Amiga Active* have devised a simple GUI front end, consisting of a couple of file selector gadgets and a convert button. You'll find the PStoPDF utility on the CD in the magazine drawer, including the Ghostscript archive. All you need to do is copy the Ghostscript drawer anywhere you like and make an assign to Ghostscript: - you can do this temporarily with the assign icon. Conversion is simply a matter of selecting the Postscript file you want to input, the name of the output file, and hitting convert. Depending on the size of the file and the speed of the CPU, this can take anything from a few seconds to several minutes per page.

As Ghostscript can load a number of other file types such as EPS, it is also possible to use this program for converting these. You can even convert PDF to PDF if you want.

Aside from not being able to set up hotlinks, the other

Preparing PS

Postscript is a description language covering vector information for fonts, embedded pictures, fills and draw functions. All this is supported in the PDF format, which means that (in theory, at least) every clean Postscript file will convert easily through Ghostscript. Alas it isn't quite that easy.

The first thing to keep in mind is page formats. It's a good idea to use A4 unless you are planning on producing something unusual; it's the right size for on screen viewing. Remember that if you are using a page layout utility such as Pagestream or ProPage, you want multiple page documents to be a stack of single sheets - if you mix single sheets with double page spreads, you'll end up with a mess.

Font choice is very important. Ghostscript will render any font other than the standard Adobe Postscript fonts (see separate box) as a bitmap. This bitmap is rendered at a high enough resolution for viewing at 800% or for general printing purposes, although it will produce characters that look less sharp on high quality printers. Just to make this a little harder for you, there's no guarantee that Ghostscript will even recognise your standard fonts for what they are. There is a file in the Ghostscript:fonts drawer called fontmap, which allows you to define an alias for the Postscript fonts. Unfortunately, with typical Unix user friendliness you have to edit a text file, getting all the slashes in the right place. Sorry, but we haven't written you a GUI for this yet. One simple solution is to use fonts that cannot be mistaken. Set yourself up a separate font subdirectory containing only the standard 14 fonts (I just use the ones in the Adobe Acrobat distribution for perfect compatibility, using type1.library), and you can use this for your default fonts when producing PDFs. The occasional decorative font in bitmap you can live with.

disadvantage of Ghostscript is that it doesn't actually embed fonts. If it meets a font that it does not recognise as a standard Postscript font, it will render it out as a bitmap. This will not produce results as good as embedded fonts will when printed at high resolutions. More importantly, it means that onscreen text is not anti-aliased even when anti-aliasing is supported, making it appear more jagged when text is small. Best results are obtained with documents using the standard Postscript fonts.

PDF supports internal compression, one of the factors that makes PDF so much more compact than Postscript. PDF files generated by Ghostscript are not compressed, however. The use of bitmaps for foreign fonts can exacerbate the situation. Converting PS to PDF in Ghostscript will probably halve the file size, but with Acrobat, it would be much smaller still. You can of course just LHa or ZIP the file. A 1MB Acrobat PDF might compress down to 800k,

Above: From postscript to ghostscript to acrobat. A .pdf written on the Amiga working perfectly under Acrobat for the PC.

while the same document on Ghostscript, which might be anywhere from a little bigger to about 8 times the size if all the fonts are rendered down as bitmaps, would at worst compress down to perhaps 2MB.

Between Ghostscript and Apdf, we have the tools to make PDF an important format for the Amiga. The imminent arrival of Pagestream 4.0 will no doubt encourage a number of Amiga companies to start issuing PDF manuals, safe in the knowledge that the public can read them with Apdf. Hopefully, we'll soon have a way of writing hotlinks as well as reading them. We'll have to keep it relatively simple for the moment, but who wants a textfile when you can put nice layouts and diagrams in a PDF?

Andrew Korn Ⓐ

Internet PDF

PDF files are commonly being used for Internet based documentation, and many web sites have PDFs as clickable links. You can use Apdf as an external viewer with your web browser to join in the fun.

Load your browser and select the settings menu (I'm using Ibrowse here, but it is similar on any browser) and find the external viewer options. Set the 'mimetype' to "application/pdf" and the extension to ".pdf". Select the option to launch an external viewer and give the full path to your Apdf installation.
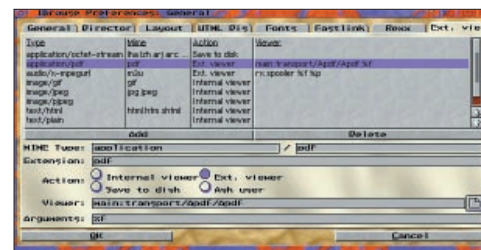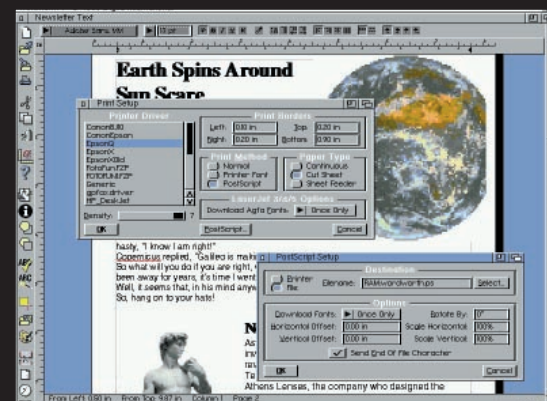

If you open a public screen to run your browser, you might want to tell Apdf to appear on the same screen. Load Apdf and select the MUI settings. Chose 'System', then 'Public Screen', and select the same public screen your Browser uses.
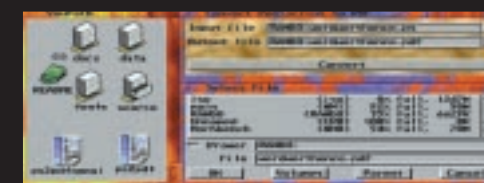
Roll your own PDFs

Any program with an option to "print to file" in postscript format will do for generating the files you turn into PDFs. For example, in Wordworth you need only select the Postscript 'Print Method' from the print set-up requester and hit the 'Postscript' button between the 'OK' and 'Cancel' buttons. Here you can set scaling, and set the path you want the Postscript file saved to.

Pagestream has a few more options. Select 'Print Setup' from the file menu, and select 'Postscript' in 'Type'. Set 'Send to' as 'Disk file', and orientation, paper size and so as appropriate. PPD is a slightly more complex story. PPDs are Postscript Printer Description Files, which tell Pagestream what to expect out of the printer - things like available screen settings, fonts and page sizes. All Postscript printers should handle all the fonts Ghostscript does anyway, so just select one which provides the page size you need. You'll find the print gadget in the print requester has now changed to a save gadget, so save that file and you're done.


Now the easy part. Assuming you have installed Ghostscript from our CD as described elsewhere, you can use the Amiga Active PStoPDF converter. Fire it up, select the Postscript file you have just generated and the name of the PDF file you want to create, hit the convert button and wait. That's it, you've now made your first PDF.

Standard Postscript Fonts

● Courier
● Courier-Oblique
● Courier-Bold
● Courier-BoldOblique
● Helvetica
● Helvetica-Oblique
● Helvetica-Bold
● Helvetica-BoldOblique
● Times-Roman
● Times-Italic
● Times-Bold
● Times-BoldItalic
● Symbol
● Dingbats
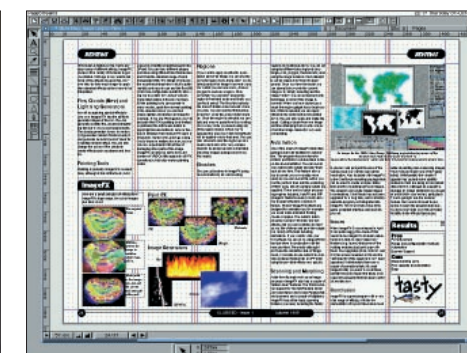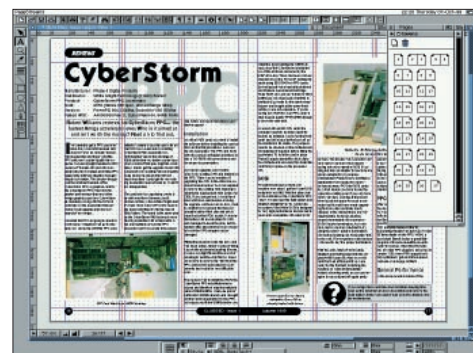
SEAL of approval

There can't be many Amiga user groups who take not being serious as seriously as SEAL. They even publish a club magazine to prove it. It's all done on Amigas, of course.

SEAL (SouthEast Amiga Link) have, in the relatively short time they have existed, developed quite a reputation. Many visitors to this year's World of Amiga show were treated to something of a SEAL roadshow - they saw Robert Williams work on the group's superb club magazine on his highly specced A4000, kitted out with a wide carriage Epson Stylus printer and a 15" flatscreen monitor. Many were attracted by the novelty of seeing an Amiga running a flatscreen monitor, but were drawn in by what was showing on that screen.

SEAL take Amiga evangelism seriously, and their club magazine is a statement on what the Amiga can do. Robert Williams and Seal explain further:

"Clubbed is published quarterly. We have 40 A4 pages each issue and colour covers. The magazine is a real team effort with Robert doing most of the layout and design (with a little help from Gary Storm). Robert, Gary and Mick Sutton are regulars, with many occasional contributors from the Amiga world. We wanted to share our efforts with the Amiga community, and so post Clubbed all over the world at cost.

"Articles are converted from the author's supplied format into plain text, then imported into PageStream 3.3 (SoftLogik), where we make extensive use of style tags for consistency.

"A wide variety of graphics applications are also used during the creation of the magazine, such as ImageFX 3, Photogenics 4, DrawStudio and Candy Factory Pro. Rob is thinking of upgrading the A3000 to 128Mb so he can multitask ImageFX and Photogenics while he works on the cover images. Each issue has generated about 300Mb of data, and the final CD we send to the printers amounts to about 60Mb, via a Yamaha 4260 CD writer driven by MakeCD.

"Clubbed is a lot of fun to do, as it inspires our love of the Amiga, and the sharing of that love to the community. It's also a lot of work - near the deadline Rob is like an expectant father; it's always a long drawn out labour! The end result is always worth it and it's great to see readers being inspired to do more with their Amigas after getting Clubbed."

Guide to Good HTML

There's more to designing a good web page than knocking out some HTML. Create a good impression with a professional looking site.

So you want to set up a web site? You've read up on HTML and have decided it's time to get yourself on the web. Before you fire up your HTML editor, stop! There's a lot more to a web site than some HTML tags. Look around at the good and bad sites on the web. Don't only look at the design of individual pages, although that is important. Look at how easy it is to navigate a site. Can you find what you are looking for with no more than a few mouse clicks? Can you use a page without waiting for more images to load? The best sites are planned before any HTML or copy is written.

Make a list of what you want to include on the site - only then can you decide on a sensible structure. The next step is to create the text and graphics. Write the text in a text editor as plain text (ASCII). You should be concentrating on making sense for now. Print it out and read it again - it's easier to pick up faults when reading printed copy than screen text. It is also a wise idea to leave it to one side for a day or a night and come back to it the next day when you've "distanced" yourself from it slightly. Mistakes are often overlooked because you remember what you meant to type, not what you actually entered via the keyboard. Ask a couple of people to check out your site before you go public.

Make sure they can find their way around before letting other people in.

Consider download speeds when generating the graphics and remember those that browse without graphic loading turned on in their browsers. JPEG is the best format for photographic images, whereas line art and buttons generally work best as GIF images. Dithering a GIF down to a small number of colours is not always a good idea as the viewer's browser may have to dither it further and image quality will suffer as a result. Reusing the same key images throughout the site means that a browser only downloads an image once during a session and caches it for future use which speeds up browsing.

What's in a name?

Unless you are setting up a major commercial site, in which case you should be talking to commercial web space providers, you will most likely be using the web space that comes with a dialup ISP account. If you are creating a web site for anything other than minimal use, consider the effect of your domain name. www.acme.freeserve.co.uk hardly conveys as professional an image as www.acme.co.uk. Using your own domain means that previous visitors can remember it - and new visitors can find it - more easily. A recent ad hoc survey into how people search for an organisation's web site showed that most people start by typing www.name.com, www.name.co.uk or www.name.org into their browser. Search engines were the second port of call.

The cost of UK domain names and hosting has dropped substantially this year. Before then, custom domains had been the province of companies and Internet entrepeneurs - now, almost anyone can afford one. This makes it even more important that you have your own domain if you are trying to

present a professional image. However, there's more to it than simply registering a domain.

First, your domain has to have a DNS (Domain Name Server) entry. When you type a URL (Uniform Resource Locator) into your web browser, it contacts your Internet Service Provider's DNS to get the IP (Internet Protocol) address of the domain. It's a bit like searching for a number in the Yellow Pages, albeit much faster.

Every domain has to be listed on two servers, and these have to be given when registering the domain. It's normal for the company handling the registration of your domain to take care of the DNS issues too, and this is where the first potential pitfall lies. Once you register a domain it belongs to you, but the company holds it for you. At some time, you may wish to transfer it to another host. Most companies that host domains will do this for you quickly and at no charge. Watch out though - some "cheaper" outfits make an administration charge for this service that can outweigh the initial saving.

Once your domain has been registered you'll want all requests for www.yourdomain.co.uk to be forwarded to wherever your web site is actually stored, and e-mail to anyone@yourdomain.co.uk will need to be forwarded on to your normal mailbox. If you register your domain with your web hosting company, the web forwarding will certainly be taken care of automatically. The mail forwarding will probably be done too, but if you used a separate domain hosting company to register and host your domain, they will have included some form of web and e-mail forwarding in

the package. E-mail forwarding is usually very straightforward - their mail server simply routes all mails received for you onto the e-mail address of your choice.

Web forwarding is a little more complicated. There are several ways in which it can be done. Some services forward all calls to your domain, others only forward calls to the root level at www.yourdomain.co.uk without handling sub pages. Some don't do any forwarding at all, they use a "frameset" page as the index page on their server and place your home page within it. Using a forwarding service also means that each access to your site has to go through two servers - the one holding the domain and the one holding the actual site. There shouldn't be any speed penalty, provided the domain host has a reasonably fast server, but there are reliability issues. If the server hosting your domain goes down, your site will be inaccessible, even though the pages are still online. This is why it is advisable never to use a domain host that charges to move a domain elsewhere: you want to be able to move your domain to another company if the service proves unreliable don't you?

Making your site visible

The web is all about providing information content for others to read. A clearly laid out site is the first step, but it's not enough: people need to know about it. Having a suitable domain name is a start, but it only helps if people know the name. What if they want to find information on a particular subject, one that your site covers? This is where search engines help. A search engine is a huge database of web pages,

indexed by content. Going to a search engine (such as the well-known www.yahoo.com) and typing in some keywords in the provided search box should return a list of sites that contain references to those words. As it is perhaps the most popular method of looking for information on the web, it is important that your site appears (correctly) on a selection of search engines.

There are two ways to be listed on a search engine's database. The first is to submit your details directly. Major search engines have a link for this on their pages, but sending the same information over and over again to several search engines is tiresome at best. Fortunately, there are a number of companies out there that will submit information about your site to a range of search engines. The range of services vary, as do the prices, although some are free. *Yahoo!* has a list of them which you can see by going to the following (rather long) web address:

http://www.yahoo.co.uk/ Business_and_Economy/ Companies/Internet_Services/ Web_Services/Promotion/

The majority of sites on search engines are discovered and

indexed by "web spiders." These are programs that search the web, following each link and classifying each page. This usually works quite well, provided you are linked to from other pages, but it is possible to fine-tune your listing for better results. To do this, add the following tags to the `<HEAD>` section of each page on your web site:

`<meta name="keywords" content="Amiga Active, Magazine, computing">`

`<meta name="description" content="this is a brief description of my fantastic web page">`

The first tag provides a list of keywords that the search engine should use to index the site or page. When a search engine lists a site in response to a search query, it normally gives the URL and the first few words of the page's body text. If you give a description header, the search engine will use this instead.

Finally, provide a e-mail link for the webmaster on your home page for feedback. If several people e-mail you asking the same question, chances are you could further improve the design and layout of your web site.

Neil Bothwick A ▶

Top Tips for Sexy Sites...

1 Use an easily remembered URL.

2 Provide clear and consistent navigation links. Don't make it a chore to find information.

3 Provide easy access to key areas of the site.

**4** Show what's new on the home page to encourage frequent visits to your site.
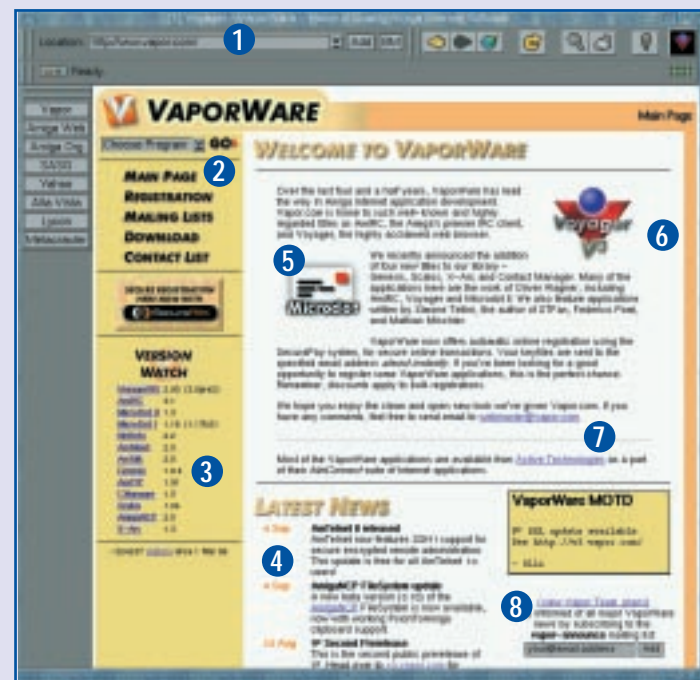
5 Use images to improve the appearance of text, but don't dominate it. The site should be just as usable without images.

6 White space around images and text makes for a more readable page.

7 Give an e-mail address for feedback.

8 Creating a mailing list for visitors wanting more information allows you to make direct contact.

# Cool Sites
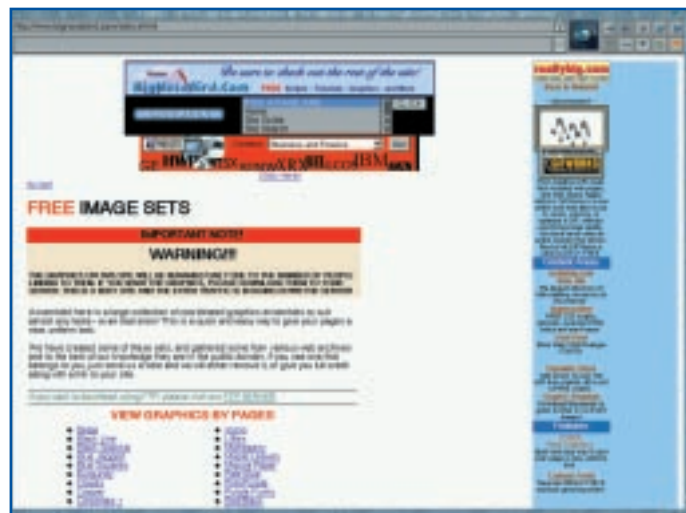
Bignosebird
http://www.BigNoseBird.com
There are many sites containing HTML and web design material. Some of them have self-explanatory names - htmlgoodies.com and cgi-resources.com for instance. "BigNoseBird.com" sounds more like a site dedicated to a big yellow feathered Sesame Street character. But no. This site contains tutorials on site design, HTML, CGI scripts, JavaScript and many other subjects. There are also plenty of images and scripts for you to make use of.

Amiga Network News
http://www.ann.lu
Usenet newsgroups are regarded by many as a rich source of information. Other people find them annoyingly full of idle chatter and pointless arguments. It's fair to say that both are right, but the second group risk missing out on some interesting info and stories that are posted to newsgroups. Amiga Network News contains a summary of newsworthy posts to the Amiga newsgroups, a way for those unwilling to read the newsgroups directly to still catch some of the highlights.
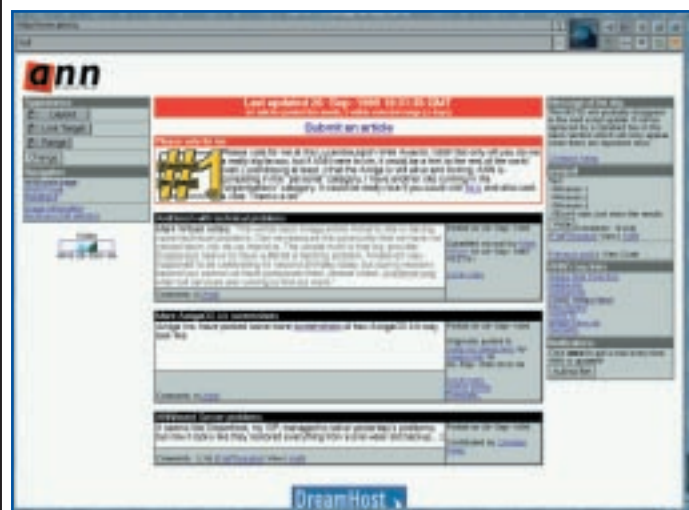
AmiBench
http://www.AmiBench.org
If you want to add to your collection of Amiga gear, or sell some old hardware to finance an upgrade, take a look at AmiBench. This is a classified advertising site, with searchable For Sale and Wanted sections, as well as a dealer directory. AmiBench is a popular site, the number of visitors helping to get a good response to adverts. If you want more generalised classified advertising, the free ads paper Loot has its adverts online at http://www.loot.com.

Amiga Web Ring
http://www.snow.icestorm.net/amiga/webring.htm
One way to increase the number of visitors to your site is to add it to a web ring. A web ring is a group of related sites, each of which contains links to other sites in the ring. The Amiga Web Ring consists solely of Amiga related web sites. Once in the ring, you display a link at the bottom of your home page that takes your visitor forward or backward around the ring, or jumps to a random site. Your site should then get visited by people that might otherwise never find it.

Urban Legends
http://www.snopes.com
The Internet is full of "urban legends." These modern myths spread much faster than their medieval counterparts thanks to the greater bandwidth of V90 modems over parchment scrolls. This site catalogues and verifies a huge number of such stories. Be warned though: this is not a site for a casual visitor. Once you start reading, you may stay longer than you intended.

Slashdot
http://www.slashdot.org
News within the small circle of Amiga companies and users may be a little slow at times, but there is always plenty going on in the general computing world. One popular computing news site is Slashdot, describing itself as "News for nerds. Stuff that matters." Links to a web site posted on Slashdot have been known to bring down web servers due to the extra hits generated. We know this from experience.

This Month: No CD audio, SVGA monitors, keyboard adapters, local area networks and printing panoramic digital photographs.

Audio angst
Dear Guru,
I hope you can help me. I don't have a clue how to get the CD music working on T-Zero. I've also had trouble with other games that have CD audio (Genetic Species is another example).

My set-up is an A1200 with 10Mb RAM, 340Mb Hard Drive, Surf Squirrel, Power 2x CD drive and a Viper '030 card. I also have AmiCDFS2 installed. I have tried to use the ATAPI Plug and Play installer but to no avail. Do you have any ideas?
Stephen Thwaites, via e-mail.

Well Stephen, I'm not really too sure on the particulars of your problem as you don't say whether you can play normal audio CD's or not. If you can, it will be a problem with T-Zer0 - there was a small bug concerning the audio preferences on the original version which should be fixed by an update to v1.01 available from the portal on ClickBOOM's web site at www.clickboom.com - If you can't even play audio CDs, it's highly likely that you haven't connected the CD Audio out to anywhere. It may sound obvious, but it's surprising how many people will overlook something like this and not notice that the audio outputs aren't connected until much later.

Out of sync multisync
Dear Guru,
I have just obtained a Samsung Syncmaster 3 SVGA Monitor, as well as an Amiga-VGA adapter. What drivers can I use to drive this monitor? The ones that come with Workbench don't appear to work at all. The frequencies listed in the monitor's manual are as follows:
31.47 kHz / 70 Hz
31.47 kHz / 60 Hz
35.52 kHz / 87 Hz
37.86 kHz / 72.8 Hz
35.16 kHz / 56 Hz
37.88 kHz / 60.3 Hz
37.50 kHz / 75 Hz

I have read articles where other people have adjusted monitor drivers to run at different 'sync' rates, but how do I do this without being able to see the display in the first place? (e.g. MonEd requires that you are running in the required screen mode before you can make any adjustments).

I am currently running my 1084s monitor on the A1200 composite output and the SVGA on the RGB port, so I can still work in PAL or NTSC mode. This is a real bind, as I could do with some extra space on my desk!

I hope you can help on this matter. Many thanks.
Mike Mayhew, via e-mail.

Euro:72Hz are the closest standard modes to your monitor specification at around 29.3kHz.

I've included a few monitor drivers from Aminet that should work with your monitor on this month's AACD - just remember that you use them at your own risk - not that anything should go wrong, of course.

If all else fails you may have to either change the monitor or invest in a scandoubler. There's an extra benefit to the latter option: You will be able to run any screenmode you fancy - even PAL modes will then be displayable on the SVGA monitor.

"...keyboard adapters tend to be very much a hit-and-miss."

Many PC monitors can be troublesome on the Amiga, and just won't quite come down far enough. Using the VGAOnly monitor driver can sometimes help as this shifts the output frequency from your video port up a little way, often enough to let the monitor 'sync in'. Simply copy this driver from "storage/monitors" to "devs/monitors" and reboot. Multiscan:Productivity and

Key to success
Dear Guru,
I have my A1200 in a tower case, so I have to use an external keyboard via an adapter. I'm using an A2000 keyboard through the adapter built into the Ateo Tower kit at the moment, and I have a little problem with it.

If I reset the computer via Ctrl-Amiga-Amiga, the reset key on the tower, or the power

Above: An A1200 Ethernet card.

switch on the front of the tower, then nine times out of ten the keyboard dies after bootup, almost as if it has no power at all. This happens whether I boot with full startup or with no startup-sequence.

The only way I can guarantee having the keyboard available after a reset is to use a software reset program or the power switch on the wall, neither of which are very good solutions. I thought this was a problem with my old keyboard adapter (from Eyetech), but as I have the same problem with the new Ateo one, I have ruled that out as the cause. Have you any idea what could be causing this?
Adam Eccleshall, via e-mail.

Unfortunately, keyboard adapters tend to be very much a hit-and-miss. Some people find certain combinations work fine, others have no end of problems, but it is possible it could be a faulty keyboard. Can you borrow another keyboard to try, or try yours on another machine? Analogic are very helpful in situations such as this, and offer an extremely efficient repair service, often while you wait. You can ring them on 0181-546-9575. I would also normally suggest a power supply problem, but this is unlikely due to your system having been re-housed in a tower.

Local area network?
Dear Guru,
I have an Amiga1200 in an Eyetech tower, and a Pentium3 PC running Windows and Linux. I'd like to network them in an Ethernet, which would allow sharing of a TCP/IP stack, as well as being able to transfer files between the machines. Could you advise me on the Ethernet options for my A1200, and the likely cost of such a network please?
Chris Korhonen, via e-mail.

"It's nice to hear from someone doing something a little out of the ordinary, especially on the Amiga."

OK Chris, your options are kind of limited, as there aren't that many PCMCIA network cards supported on the Amiga. Luckily though, the ones that are, are very good. You should look out for the CNet CN40BC card. This card is known to work very well with the cnet.device available from Aminet. This card will give you a BNC connection which you can then connect to any BNC cards you can pick up for the PC. PC NICs (Network Interface Cards) shouldn't cost much more than 20 pounds each and the CNET card isn't that expensive either if you shop wisely. US online sites are selling it for as little as $53.

There is an adapter that you can use on the A1200 that circumvents the hardware shortfalls of the A1200's PCMCIA port. Reports from people who have set up the type of network you are looking at suggest that simply removing the card when you boot the Amiga and then reinserting it will also avoid the slow down problems that can appear without the adapter - possibly another "budget" measure to consider.

As for software, it depends on which machine you want to be the gateway to the Internet (i.e. the one with the modem). You can use the Amiga as the gateway, but it will involve the extra expense of buying Miami Deluxe because of its IPNat support and firewall. If you are planning on using the PC as the gateway, PPPShare is an excellent and very simple proxy server for windows and has a shareware fee of only $25 dollars. I don't see why you shouldn't have it all working for little more than 100 pounds, using freeware, shareware and a spot of careful shopping.

Panoramic!
Dear Guru,
I am currently producing some very exciting panoramic photographs by joining digital photos together, resulting in files over 4000 pixels wide by about 700 pixels high. I am using both ArtEffect3 and Photogenics4.2. Photogenics works the real magic of creating invisible joins, but rotating a picture by a small amount before it is joined into the final image is very, very slow even though I have a 68040 and PPC. ArtEffect is quicker, but will not accept fractions of degrees. Is there any other software that will perform this task quickly?

To print these images, I am using a Canon 4300 printer with photo head, and Turboprint. I place the images in either Turboprint Graphics Publisher or in Drawstudio before printing. Only the 'wide tractor' preference in Turboprint will increase the printable length - and then only as far as 16.5". I would like to print a size of about 24" x 8". Although this is possible by disabling Turboprint and printing from CanonStudio or Workbench settings, print quality suffers.
Philip Sheppard, via email.

It's nice to hear from someone doing something a little out of the ordinary, especially on the Amiga. Unfortunately, as you have found out, for graphics use, the Amiga can be rather slow. You've probably been using interpolation in Photogenics' rotate function - this takes a lot more time but improves quality. ImageFX, the graphics workhorse, has more rotate options and does it faster. We ran a 2-degree rotation speed test on a 640x480x24-bit image and the results were:

Art Effect: 6.8s
Photogenics
(no interpolation): 7.3s
Photogenics
(interpolation): 44.3s
Image FX
(simple 2D rotate): 2.8s
Image FX
(Complex 2D rotate
with 50% blend): 7.23s

Regarding your print problem, have you considered putting the finished picture into a DTP package and printing from there? Something like Pagestream 3 will easily handle that size document, and it is known to work with Turboprint.
The Guru

Feeling blue? Ask the Guru

It's not necessary to climb the Himalayas to bring your problems to the *Amiga Active* Guru. If you have any technical problems, tips you'd like to pass on, or requests for in-depth coverage of a particular problem, please send them to: Ask The Guru, *Amiga Active* Magazine, Systems House, 3-11 Spring Road, Bournemouth BH1 4PZ - or alternatively, e-mail them to the Guru's personal mailbox: guru@amigactive.com

Please don't send us an SAE with your letters, as we cannot enter into personal correspondance due to time constraints. Also note that techincal queries cannot be answered over the 'phone, as the *Amiga Active* Guru spends most of the month meditating.

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AMIG**A**CTIVE MAGAZINE
Issue 2 - November 1999

AMIG**A**CTIVE MAGAZINE
Issue 3 - December 1999

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Netconnect 3	reviewed
Zorro IV	no, really
Digital Convergence	explained
Goal! 2000	hopefully
Pagestream 4	probably
Top Gear	definitely

...and plenty more. Don't miss it!

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Retroactive

The A1000, fuzzy genlocks and answering machines. Not to mention the continuing saga of Elite.

When you're trying to get new technology off the ground, no matter what it is, building the widget is only half of the battle. It's not enough to just build a brand-new killer box, you need accessories, peripherals and add-ons to go with it. The public wants to see expansion.

When Commodore was building up to the launch of the A1000, they were well aware of the fact that they had a completely new platform, with very little "prior art" to reference. Just telling people it would be a great computer for graphics and sound wasn't enough, because nobody had really seen one of those yet. So instead, they announced a slew of add-on products - never mind that most of them never appeared.

Among the more notable pieces of software announced in glossy advertising but never released for the Amiga were Lotus 1-2-3 (which at the time was the absolute de facto computer business package), and a slew of Borland development languages. Rumour has it that Lotus even proudly displayed an Amiga 1-2-3 prototype in their offices, next to computers running their PC and Mac offerings. It was never to be.

Even more interesting was the vapour hardware. The A1000 wasn't long on expansion slots. It had just two: one in the front of the machine, meant for a 256k RAM expansion, the other in the form of a sidecar slot very similar to the A500's. But the computer was still designed with an eye for elaborate expansion. Much was made of the 1000's "keyboard garage," a raised area of the computer that the keyboard could slide under when not in use. Less well known was that the back of the computer was designed so add-on units could fit snugly against it.

The king of the A1000's vapour hardware was the Amiga 1000 Answering Machine. These were considered clever enough in 1985, so having a computer do the work for you - perhaps with options such as multiple mailboxes - would be incredible! And it would slide snugly under your computer, out of sight and out of mind.

Alas, it never showed its face; it wasn't until years later, when GVP came out with their Zorro slot PhonePak, that the Amiga finally had a true answering machine/voice mail solution. Ten years later, there's hardly a modem built that doesn't have such capabilities built-in.

Perhaps even more notorious than the answering machine was the Amiga 1300 Genlock, an external video module that would be one of the first low-cost NTSC video genlocks to connect to an inexpensive personal computer. And it did in fact ship. So what's the problem? It was widely reported that the genlock, well, didn't genlock! It would plug into the external RGB port and look very nice sitting under the computer, but it didn't actually do anything except make the Amiga video output look fuzzy. Obviously, we should be more careful when wishing for something; some products would be better off as vapourware.

Above: Succinctly put.
Left: The Amiga 1000 - built by genius, sold by vapor.

Compton's Curse
I've known for years that I carry a curse which has brought ruin and misfortune on many of the companies and technologies that catch my interest. So it should come as little surprise that, shortly after issue one of *Amiga Active* went to press, Ian Bell's Elite download page, written up in this very section, was shut down.

Apparently, Elite co-author David Braben has been grousing about the page for years, since he never gave his consent for the various Elite versions to be distributed as freeware. Finally, after enough harassing phone calls to CIX, they decided to yank the disputed pages. But that's not where the story ends - there's even more intrigue. Now Braben says he wants to offer Elite as freeware after obtaining some of the permissions Bell overlooked, but claims that he isn't getting co-operation from Bell.

The moral of this story? Write such seminal classics in computer gaming all by yourself, and avoid this sort of bickering fifteen years down the line.

Jason Compton

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